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AESTRACT

An investigation was made of the Nashville Union Catalog to explore the possibility of its expansion into a regional catalog and making it the nucleus of a bibliographic center serving the state of Tennessee. The primary objectives were investigation of: the catalog and its format possibilities; the structural organization, and required funding, for an operation involving many libraries of different types; access to the union catalog, and service from it. Among the recommendations were: continuation of the present card form, expansion to include cataloged items of all types of libraries, submission of funding requests to likely sources for computerization of acquisitions, expansion of the operation into a bibliographic center with initial service to local libraries but with a view of expanding state-wide, and that the Tennessee State Library should consider the project for funding. (AB)

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FINAL REPORT

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AN INVESTIGATION OF MORE EFFECTIVE MEANS OF ORGANIZATION AND UTILIZATION OF THE NASHVILLE UNION CATALOG

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AN INVESTIGATION OF MORE EFFECTIVE MEANS OF ORGANIZATION AND UTILIZATION OF THE NASHVILLE UNION CATALOG

Summary

The Nashville Union Catalog, established in 1936, is a card form author catalog of books and serials held by the following Nashville libraries: Joint University Libraries (Vanderbilt University, George Peabody College, Scarritt College), Fisk University Library, Meharry Medical College Library, Tennssee State Library and Archives, Public Library of Nashville and Davidson County, and Methodist Publishing House Methodist Collection. In the recent past the idea has been developing of expanding it into a regional catalog and making it the nucleus of a bibliographical center serving the state of Tennessee.

The primary research objectives were to investigate the catalog itself and its format possibilities; the problem of inclusiveness both as it applies to libraries and to holdings; the structural organization of an operation involving a large number of libraries of different types and especially its funding problems; access to the union catalog and service from it.

To arrive at some answers to these questions the following methods of research were utilized: study of pertinent literature and related operations; study of the union catalog itself, including a random sample to determine its characteristics; circulation of a questionnaire to a number of area libraries not now in the union catalog as well as to the present members in order to determine uniformity of technical processes, inter-library loan patterns, attitude toward library cooperation on various levels, sentiment toward union catalogs in general and a Nashville Area Union Catalog in particular, as well as statistical information allowing estimates of size after additions; interviews with both questionnaire recipients and other area librarians.

Statistical records of the union catalog furnished a picture of its growth and the pattern of contributions and withdrawals by members. Total estimated number of cards on July 1, 1970, was 818,369. The random sample indicated the following characteristics; (a) 58.81% unique titles and 41.19% multiple titles; (b) 82.91% personal author entries, 12.24% corporate entries, 4.85% title entries; (c) 49.66% works published before 1940, 31.17% works published 1940-1959, 19.16% works published 1960 and after; (d) distribution per subject area according to the Dewey Decimal Classification indicated heaviest concentration in the 300's, 800's, and 900's.

Microfilming and computerization of the union catalog were investigated. Cost estimates obtained from films and consultants furnish a basis for a rough calculation of costs involved.

Recommendations: The Nashville Union Catalog should be continued for the time being in its present card form. It should be expanded to include all cataloged items of all types of libraries, at first in Middle Tennessee, later in all of Tennessee, starting with and including those libraries approached in this study which have indicated interest. The union catalog should be edited before new additions, including consolidation of duplicates on one master card with locations posted; a permanent editing staff should be provided. Microfilming the union catalog after first and subsequent additions of libraries should be considered for any libraries wishing to purchase a copy to have it available and as a safeguard to the card catalog if destroyed. The microfilm should be provided with Kodamatic indexing for speedy retrieval of items and could be inserted in cartridges for reading on 16 mm readers. The cost for 800,000 cards should be under a thousand dollars.

Funding requests for computerization of at least current acquisitions should be submitted to likely sources, both state and federal. Computerization should be based on MARC II copy plus local conversion to that format if not available from the Library of Congress. Know-how and hardware are available locally if the funds can be found.

The union catalog operation should be expanded into a bibliographic center, limiting participation experimentally to local libraries but with a view of expanding state-wide. Priorities for service: to make available the resources of participating libraries, to locate materials in other libraries, to serve as switching center for inter-library loans; other services to be added as funds permit. Services should be available to all Tennesseans if state funded, otherwise to whomever the participating libraries shall prescribe. Communication with the center would be by phone, TWX, mail, personal visit, possibly WATS line.

The Tennessee State Library should consider the project for funding under LSCA Title III, since this is obviously a state-wide venture of considerable magnitude and only the first phase of a system that would interface with regional and national information networks. If State funding cannot be obtained, some other representative group (e.g., Tennessee Library Association) should attempt to find a way to support the operation. As a last resort, local libraries should be approached with budget proposals and suggested support assessments, supplemented by a fee-for-service structure, which might produce the necessary funds to support the center. Location of the center should be where it can give the best service, preferably supported by a good bibliographic collection, with room for expansion.

AN INVESTIGATION OF MORE EFFECTIVE MEANS OF ORGANIZATION AND UTILIZATION OF THE NASHVILLE UNION CATALOG

1. Introduction

(a) Background for the Study

The vital importance of rapid information retrieval is today an accepted fact. It is also generally accepted that researchers should have access to the widest possible range of research materials. In order to provide quick access to these materials, various cooperative schemes between libraries have been developed, ranging from interlibrary loan to union catalogs of various coverage, and more recently to far-reaching plans for nationwide information networks utilizing sophisticated computer equipment (e.g., the EDUNET proposal).

Several Nashville Libraries have participated in various local cooperative plans since the 1930's. Since 1936 three adjacent institutions of higher learning--Vanderbilt University, George Peabody College, and Scarritt College--have profited from intensive cooperation through the Joint University Libraries system (JUL), which pools their library resources (now over a million volumes) and makes them available to all students and faculty of the member institutions.

The Nashville University Center adds Fisk University to the above-mentioned institutions in a cooperative enterprise. Since these four institutions, on nearby campuses, serve different areas of the educational field, they have worked out a plan of cooperation which allows them to use each other's resources and facilities, while remaining independent in organization and administration. A student may take courses for credit in any of these institutions to complete his study program. There is also now the Nashville University Center Council (NUCC) which adds Meharry Medical College to the above--a study group sponsored by the Ford Foundation--which is investigating further avenues of cooperation among the member institutions.

Recently the Tennessee State Library published a union catalog (adult titles) of the holding of Tennessee regional (public) libraries. This catalog is being widely distributed across the state. The Nashville Public Library is one of four Technical Information Centers for reference service in Tennessee.

All of the above-named institutions are engaged in one common cooperative enterprise--the Nashville Union Catalog. Established in 1936, it is a

fairly comprehensive catalog of the holdings of eight participating Nashville libraries, most of them connected with colleges and universities but also including the Tennessee State Library and Archives, the Public Library of Nashville and Davidson County, and the Methodist Publishing House. The catalog covers books (adult titles) and serials; it is in card form and is located in the JUL Central Division building.

In the recent past a number of libraries in the Nashville area not now included have expressed the desire to participate in the Nashville Union Catalog. Among these are several university and college libraries in Middle Tennessee and a number of religious institutional libraries in Nashville. The idea has been developing of expanding the Nashville Union Catalog into a regional catalog--in the first stage at least a Nashville Area Union Catalog--and to include into it holdings of all types of libraries in the area--Public, Academic and Special.

While the services rendered by the union catalog to smaller institutions would be most significant, the inclusion of many special libraries would provide an important addition of research materials available to scholars connected with the larger institutions. In addition, some of the present members are depositories of Federal and State documents which thus would become more readily available for research in this area.

From time to time these plans were discussed by various interested librarians, and in early fall of 1969 a research proposal was prepared to investigate the problems and possibilities involved in the development of the present union catalog into an effective regional clearing house of information for the location and borrowing of books and related materials available in Middle Tennessee libraries. The idea was further discussed by a group of librarians from all over Tennessee who attended the U.S. Office of Education Institute on Interlibrary and Interagency Cooperation held at George Peabody College at the end of October 1969. This group drew up a draft plan for library service in Tennessee which envisaged the Nashville-based union catalog as the nucleus of a bibliographical center for the state of Tennessee.

The research proposal was submitted to the U.S. Office of Education with a request for funds to conduct the investigation and met with favorable response. This, then, is the Final Report of the research project to "investigate more effective means of organization and utilization of the Nashville Union Catalog," with the ultimate aim of making it into one link in a nationwide--or international--network of library service.

(b) Research Objectives

Research was required on several aspects connected with the ultimate aim stated above. First, the present union catalog has, due to lack of a staff of its own for the past several years, been allowed to deteriorate. While the cards themselves are in good condition, filing errors abound. The system of filing itself is confusing. No attempt was ever made--in spite of recommendations--to consolidate duplicates on one master card; instead all the cards contributed by member libraries are filed into the catalog, creating

at times long sequences of cards describing the same work held by the various member libraries. The differing cataloging practices of the member libraries, differing also over the course of time, have created search problems since "see references" have not been provided in sufficient amount. If a number of additional libraries were to be added, these problems ought to be dealt with, in addition to which clear procedures ought to be established for the maintenance of the union catalog, if continued in its present card form. On the other hand, the possibilities of computerization of the union catalog should be looked into, since this would produce a tool which would not only be a speedier location tool but could also serve as the basis of additional library services to the area, such as centralized processing, bibliographic verification on the spot if book catalogs or computer terminals could be provided, and a number of other uses, depending on how imaginative the input format was.[1]

In addition to an investigation of the catalog itself and its format possibilities, a second aspect needing investigation was the problem of inclusion--both as it applies to number and type of library and to the type of library materials to include. The attitude toward inclusion of non-book materials needed investigation. Problems arising out of including the holdings of particular libraries needed study. The cost of including all of a library's holdings versus only certain categories needed considering.

Other questions of importance were to determine (1) the structural set-up of an operation involving a large number of libraries of different types, and especially its funding problems; and (2) the access to the union catalog and service from it.

To arrive at some answers to the above questions the following methods of research were decided upon:

(1) A thorough review of pertinent literature, as well as study trips to observe related operations.

(2) A detailed study of the Nashville union catalog, including a random sample of the catalog to determine its characteristics.

(3) Circulation of a questionnaire to a number of area libraries not now part of the union catalog on one hand, and to the present members on the other hand, in order to determine uniformity of technical processes, interlibrary loan patterns, attitude toward library cooperation on various levels, sentiment toward union catalogs in general and a Nashville Area Union Catalog in particular. In addition, certain statistical information would furnish an idea of the size of possible additions to the catalog. The questionnaires could be followed up by interviews to further discuss these and other related matters.

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[1]See J. L. Dolby, V. J. Forsyth, and H. L. Resnikoff, Computerized Library Catalogs: Their Growth, Cost, and Utility (Cambridge, Mass., & London: M.I.T. Press, 1969).

(c) Advisory Committee

To aid the Principal Investigator, Mrs. I. Margareta Martin, in her investigation, an Advisory Committee was established consisting of Dr. Edwin S. Gleaves, the Project Director; Mr. Frank P. Grisham, Director of the Joint University Libraries; Mr. Frank Robert, Reference Librarian of Joint University Libraries' Central Division; and Miss Elizabeth Williams, Chief Cataloger of the Public Library of Nashville and Davidson County. Other knowledgeable persons were invited to participate whenever deemed useful. Among these were Mr. Wilburn Clouse, Director of the Computer Center at George Peabody College (Computer Consultant to the Research Project); Mrs. Eleanor Morrissey, Head of Technical Processes at Joint University Libraries; Mr. David Marshall Stewart, Librarian of the Public Library of Nashville and Davidson County; Miss Johnnie E. Givens, Librarian of the Austin Peay State University Library; Dr. Wilmon Droze, State Librarian and Archivist of Tennessee; and his newly appointed Associate State Librarian, Mr. Vince Anderson.

The Advisory Committee met for two-hour sessions approximately every two weeks in the course of the project to discuss questions raised by the Principal Investigator and Project Director involving problems connected with their specialties and to report findings to the committee. This was a working committee and demanded a great deal of its members in terms of time and independent study and research.

(d) Problems Encountered

The proposal for the research project was submitted to the U.S. Office of Education in the beginning of November, 1969, envisaging the project period to be December 1, 1969, to May 31, 1970, i.e., six months during the regular academic year. However, notification of the grant award was not received until April 24, 1970. The project period was still calculated as six months--April 1 to September 30, 1970--but the notification was signed April 22, 1970. Originally it had been planned that the Principal Investigator would devote half-time to the investigation, allowing ample time for such research aspects as return of questionnaires and a user study over a period of time. However, by Spring, time was of the essence, and thus it was decided to conduct the investigation on a full-time basis from May 1 to August 31, 1970, by which time the project should be virtually completed, leaving only the preparation of the final report.

In short, the pace of the investigation had to be accelerated. But the fact that the research period changed from the regular academic year to summer school time also had implications for the project. The student body of the University Center is not the same size nor the same type entirely during the summer as during the regular academic year. Many are not as familiar with the libraries of the University Center as are regular students. This was considered of such significance that extensive sampling of the present use patterns of the union catalog was not deemed to furnish a true picture of its use during the regular school year. Nor did time permit a long-term study of this kind.

The Summer Session is also vacation time for some librarians, and this caused delays in the return of the questionnaires, which also had to be requested for return within a much shorter time-span than had been intended originally. Also, planning interviews with librarians met with some difficulties due to vacations and attendance at the ALA convention in Detroit in June.

While some may feel that further study is needed on such aspects as use patterns in order to arrive at conclusions about the utility of a union catalog, the present research team feels that an improved catalog, which is far better known, will immediately generate such increased service request levels, that a recording of present use may only serve as a deterrent to planning expanded activities. In addition, much of the present use in the form of personal search of the catalog at its location in the lobby of the JUL Central Division is limited to locating materials in the JUL system itself which does not have a union catalog of its holdings; such a union catalog is, however, now in the planning stage. Hence, at some future point, after these several events have occurred (JUL union catalog, expansion of Nashville Union Catalog with improved service aspects), a user study will become a useful guide to whether the union catalog is indeed worth its cost.

2. Research Methods

(a) Background Research

The investigation was begun by a thorough review of existing literature on union catalogs, state plans for total library service, library cooperation involving centralized services of various kinds, bibliographical and reference centers serving wider areas than one or two institutions, present activities involving computerization of library catalogs in general and union catalogs in particular, production of book catalogs, the Library of Congress computerization activities, etc. The Bibliography (Appendix A) lists, at least in part, these readings. Some of the readings and information gathered in the above phase were summarized or abstracted by the Principal Investigator for background readings for the Advisory Committee members and a few other interested persons. It is not felt that a detailed analysis of these readings is pertinent in this report, especially since many items have been analyzed and abstracted in other publications (see, e.g., Y. Kuncaitis, Catalogs and Bibliographic Centers: A State-of-the Art Review; Galen E. Rike, Statewide Library Surveys and Development Plans: An Annotated Bibliography, 1956-1967; and Library Surveys and Development Plans: An Annotated Bibliography; which are listed in the Bibliography).

Some of the most valuable materials were located among materials sent gratuitously, upon request, to the Director of Peabody Library School (Project Director of this research project). These were mainly newsletters and reports on research projects which are not printed and hence mostly not for sale but are among the most valuable contributions of background information for a research project such as the present one.

Another source of valuable information was materials sent by directors of other union catalogs and bibliographical centers in response to letters requesting information more up to date than that in the materials at hand. Contacts with friends involved in similar projects yielded much helpful information, as was that received from the West Virginia Library Commission which had recently contacted all state libraries concerning union catalog projects in operation or underway. Contact was also made with Knoxville and Memphis in Tennessee to find out if anything was in the planning stage elsewhere in the state, in order to coordinate the activities. One significant project was reported: the union catalogs of scientific and technical titles in the University of Tennessee (Knoxville) libraries and in the Oak Ridge technical libraries, located in the UT Science Library and in the Oak Ridge Associated Universities Library, and the Union List of Serials in the Technical Libraries of the Oak Ridge-Knoxville Area.

The Principal Investigator also visited Redstone Scientific Information Center to acquaint herself with the computer operations and other sophisticated information retrieval services there. This trip was especially helpful

in contributing to the idea of rapid access to the union catalog through indexed microfilm, as will be described later.

(b) Characteristics of the Nashville Union Catalog

1. Short historical review of the union catalog

There are no complete historical records of the Nashville Union Catalog.[1] In the course of changes of personnel under whose supervision the union catalog was--as part of the Catalog Department of the Joint University Libraries' Central Division--and in connection with moves into new premises, some records have been lost. The statistical records made available for this study date back to fiscal year 1959/60.

Instrumental in the establishment of the Nashville Union Catalog was Dr. A. F. Kuhlman, first Director of the Joint University Libraries. The work connected with preparing the catalog was started in the summer of 1936, under the direction of Dr. Kuhlman.[2] The catalog was in operation before the end of the year. Dr. Kuhlman's motives for establishing the union catalog are as valid today as they were then:

(1) To make the resources of Nashville libraries as accessible as possible, in order to facilitate reference and research; and
(2) To prevent unnecessary and expensive duplication of acquisitions among participating libraries.

The holdings of the libraries of the following institutions were included at the establishment of the Nashville Union Catalog:

Fisk University
George Peabody College
Meharry Medical School
Nashville Public Library
Scarritt College
Tennessee State Library
Vanderbilt University (including its General Library and all school libraries with the exception of Law, which was added around 1950)

The cards representing the holdings of the original member libraries at the time of unionizing were dexigraphed and then interfiled. The symbol of each library is in the upper right corner of the card, and the libraries were provided with a stamp to continue entering their symbol there on the

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[1] A fairly detailed history of the Nashville Union Catalog can be found in Eleanor Morrissey, "Union Catalog of Books in Nashville Libraries," A Guide to Union Catalogs in the Southeastern States. Prepared by the Reference Services Division of Southeastern Library Association, 1965, pp. 11-13.

[2] See A. F. Kuhlman, "The Union Catalog of Libraries of Nashville," Southeastern Library Association. Papers and Proceedings. Ninth Biennial Conference, October 1936, pp. 31-38.

subsequent cards for new acquisitions to be sent to the union catalog monthly, before the 5th day of the month. The code designations of the member libraries will be used in the following, when referring to them. (See Appendix B.)

There has never been a separate budget for the union catalog. Each library contributes cards for current acquisitions, and the JUL Central Division has been responsible for filing them into the union catalog, as well as for reference service based on the catalog, mainly by telephone through the Reference Department. The card catalog is located in the lobby of the JUL Central Division, where it is also available for personal search on the spot and is extensively used that way by the faculty and students of the University Center for whom this has been the only way to locate materials in the JUL system itself, in addition to the other libraries represented. The other member libraries have never made any financial contributions to the maintenance of the catalog until in May, 1970, when Tennessee State Library and Archives set aside funds to employ one full-time (non-professional) staff person to provide telephone location service and handle the filing into the union catalog, under the supervision of the JUL professional staff.

According to Eleanor Morrissey, "The Nashville Union Catalog is an author catalog including main entries for both separates and serials, author analytics, name references, and title references for periodicals."[1] Originally, serials were filed into a separate alphabet and detailed holdings information was maintained. After several years, the cooperating libraries agreed that it was too difficult to keep up with correct holdings information, and this aspect of the catalog was abandoned. The serials' cards were interfiled into the main catalog, and the user is referred to the designated library for detailed information. At this time, author analytics were also discontinued.

It would have been overwhelming for the JUL staff to try to consolidate entries for duplicates on one card. On one hand, the cards bore the call number from each library, and the notes on the cards provided by each library in some cases (especially earlier) would have made consolidation difficult. Hence, the cards are merely filed into the catalog, resulting in sections where the same work is represented by several cards, one from each library holding the work. These were to be filed in a particular order where the member libraries' codes would be in alphabetical order. In the course of time, confusion has arisen where the same work appears in several editions.

Originally the entire collections of the participating libraries were covered, with the exception of the Nashville Public Library which was to omit elementary juvenalia and some popular fiction not considered a permanent part of their collection. The extent to which the latter has been contributed or omitted has been due to subjective decisions of their librarians in the course of time.

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[1]Morrissey, pp. 12-13.

Discards and losses are to be reported by the contributing libraries. Originally the JUL staff pulled the cards for these, but in 1962 a Nashville Catalogers' meeting voted that each library having over twenty withdrawals would send someone from its own staff authorized to make such withdrawals. After withdrawing, the approximate number of cards withdrawn should be indicated to the JUL staff for their statistical records. In the course of time this has tended to become a burden on some of the participants which do not have sufficient staffs to spare one person for this purpose.

After the original enthusiasm had subsided, and after several changes in staff at the participating libraries, contributing to the union catalog seems to have become somewhat of a bother, and at times there has been carelessness in contributing current acquisitions information. From time to time the JUL cataloger in charge of the union catalog has had to write letters to participants to remind them to send in their cards monthly, or to send someone to make withdrawals. Whether the current acquisitions have in fact all been reported is also open to question, since the statistical records show large periods with no contributions for some libraries. Also, if a card intended for a library's public catalog happened to be destroyed, the union catalog card was used instead, without preparing another one for the union catalog. Therefore, the union catalog is by no means a 100% reliable location tool.

The tentative rules for the union catalog, dated March 30, 1937,[1] prescribed that "in so far as feasible, LC entry form should be followed," and the essential "See" and "See also" references should be made by catalogers at cataloging time, when the necessary cross references are likely to occur to the cataloger rather than to the filer at filing time (the filer was usually a non-professional anyway). The latter provision has probably to some extent been lost sight of in the course of time, because increasingly fewer "see references" are provided with the cards contributed. The tentative rules further prescribed that changes in classification or author numbers need not be reported--a further indication of the unreliability today of the call numbers.

In the course of the years, some special studies of the Nashville Union Catalog were conducted, but none were published, and copies of most cannot be located today. One such study concerned the feasibility and desirability of consolidating locations on one master card. It suggested stamping the locations evenly on the top margin of the card, in alphabetical order, with the exception of the original symbol on the card used as master card. The best and most complete card was to be chosen as master card, and it was assumed that the choice would be made in descending order of participating libraries, beginning with JUL cards. Dexigraphed cards should be replaced by cards from the Title II LC card catalog when available. The call numbers of the JUL units were to be entered as well. Nothing came of this proposal.[2]

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[1] See Downs, Union Catalogs in the United States (Chicago: A.L.A. 1942), pp. 335-338.

[2] (Proposed) "Rules for Consolidating Holdings in the Union Catalog" (Typewritten sheet).

In the beginning of the 1960's serious efforts were made to expand the Nashville Union Catalog. Fund request proposals were prepared, and at least one was submitted to CIOS, Inc. Suggestions were recorded of libraries to be added, received from various librarians involved. Among these suggested additions were: Methodist Publishing House, Baptist Sunday School Board, the Disciples of Christ Historical Society, Upper Room, Trevecca Nazarene College, David Lipscomb College, Belmont College, Tennessee A & I (State) University, U. S. Veterans Administration Library, Free Will Baptist Bible College, etc. Of the above, Methodist Publishing House was included in the union catalog in January 1963 but was merely to start sending cards for current additions to the Methodist collection, not the general collection.

Of the original members, Meharry Medical College contributed cards irregularly until September 1966, after which no more cards have been received from there. This had been due to staff changes at the Meharry library, where no written records had been kept about participation in the Nashville Union Catalog.

According to statistical records dating back to fiscal year 1959/60, the most regular contributors of cards for the union catalog have been Peabody and the Public Library. Peabody and VU-Med have made regular withdrawals, while JUL, Public, and Fisk have made sporadic large withdrawals. The records show no withdrawals from the others, but this may be due to failure on the part of the staff person sent over to pull cards to notify the JUL Catalog Department of this fact. But in some cases no withdrawals have been made in the union catalog, according to the librarians.

Since both contributions of cards (over 20 cards) and withdrawals were usually measured by inches rather than exact card count, it is impossible to know exactly how many cards the present union catalog contains; the statistical figures are only an approximation. The following table is based on the available statistical records for the period 1962-1970 and furnishes as accurate a picture as can be produced of the growth of the Nashville Union Catalog during that period. It may be noted that the additions for the last fiscal year period have still for the most part not been filed into the main catalog, due to the lack of time of the JUL cataloging staff. Since the employment of the union catalog staff person, the filing has been slowly progressing.

YEARLY CONTRIBUTIONS TO THE NASHVILLE UNION CATALOG

Contributor	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70
Fisk University	990	2,120	1,025	2,190	3,225	3,202	3,837	1,174
J.U.L.	9,573	9,855	15,215	16,595	15,415	10,913	21,648	22,825
JUL-Religion	1,182	1,190	2,313	1,482	4,010	5,015	10,470	5,050
Meharry	147	150	160	132	195	0	0	0
Methodist Pub. H.	---	363	365	470	850	827	0	1,400
Peabody College	2,484	1,467	2,030	2,352	2,495	1,643	2,348	3,900
Public Library	1,265	2,400	2,875	3,325	2,435	7,286	7,276	4,565
Scarritt	1,012	854	1,043	1,768	2,010	1,854	1,198	1,875
State Library	2,097	1,295	1,970	1,719	1,220	1,421	1,411	4,268
VU-Law Library	689	615	950	1,248	1,030	1,045	1,180	1,155
VU-Medical Lib.	440	486	421	687	1,238	1,112	1,609	1,588
Totals added	19,879	20,870	28,367	31,971	34,123	34,368	50,977	48,575
Totals withdrawn (and reported)	1,940	1,035	1,057	557	2,290	2,120	4,707	545
Net increase	17,939	19,835	27,310	31,414	31,833	32,248	46,270	48,030

Total of cards in Union Catalog on July 1, 1970: 818,369

2. Random Sample of the Nashville Union Catalog

In order to analyze the present union catalog, it was decided to study it through a random sample. The sampling was done by means of a multi-stage sample consisting of a cluster sample at the first stage and systematic sample at the second stage. One card catalog drawer formed a "cluster." Out of the total of 1110 drawers, 25 drawers were selected on basis of numbers in a list of random numbers.[1] Every twentieth card in each of the drawers was recorded as to the following aspects:

(a) unique title or multiple holdings
(b) author entry: personal, corporate, or title
(c) age of work according to date of publication:
    1960 to date
    1940-1959
    up to and including 1939
(d) subject area of work, based on Dewey Decimal Classification number.

The number of cards involved in recording the aspects (a) to (d) was 743. The results will be given in absolute figures--x cards out of a total of 743--as well as in percentages, in some cases where the percentage furnishes a clearer picture of the catalog.

(a) Unique vs. multiple copies. While it was simple in many cases to determine whether the card drawn was for the only item available through the union catalog, there were cases that required close scrutiny. Several different editions of the work might be represented. The cataloging might differ in various libraries even for the same work. The same library might indicate ownership of two or more copies on the same card. Since different editions are, for bibliographical purposes, different works (in many cases the researcher wants a particular edition of the work), these were treated as separate works, and if the card drawn was the only one for that edition of the work, it was recorded as a unique title. If, however, it could be determined that even if the cataloging information differed somewhat, this was still the same edition as another work represented by a card in the proximity of the one drawn, it was recorded as a multiple copy. Due to the somewhat confusing filing rules, which specify that libraries holding a book should be filed alphabetically in the union catalog--hence logically for each edition of a work all libraries holding it should be represented, but often this rule had not been followed, and all editions of a work might be placed together for each library--it was necessary to examine several cards both before and after the one drawn to make sure of its unique or multiple nature. Finally, if the card drawn indicated that the particular library held two or more copies of the work, but it was the only library having it, it was listed as a unique title, based on the assumption that--especially for certain types of works, e.g., old textbooks--the extra copies might well have been weeded out in the course of time without correction of the union catalog card which would only be withdrawn with the removal of the last existing copy in the particular library.

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[1] Source: Hubert M. Blalock, Social Statistics (New York: McGraw-Hill, 1960), p. 437.

The results of the sampling of this aspect was that out of the total of 743 cards, 437 cards were for unique titles (17 of these were periodicals), 159 for works held by two libraries (3 of these were periodicals), and 147 for works held by three or more libraries. When the percentages were calculated, they showed that on the basis of the random sample, the union catalog contains 58.81% unique titles and 41.19% multiple titles (21.40% titles held by two libraries and 19.70% held by three or more libraries). In other words, the union catalog is to a fairly high degree a unique title catalog at present. In the course of the sample it had also been recorded where the unique title was held. The overwhelming majority of unique titles is held by the libraries of the Joint University Libraries system; only 74 unique titles (10%) were held by other libraries, as follows: Nashville Public Library 28, Tennessee State Library 22, Fisk University Library 21, Methodist Publishing House 3--out of the total of 743 cards sampled.

(b) Type of main entry. In sampling for this aspect the cataloging practices of the member libraries became significant. Also the change from ALA cataloging rules to Anglo-American cataloging rules was of significance. While the earlier rules would record a work under its editor, the AA rules might place it under a corporate entry. It was decided to treat the cards drawn just as they were; however, note was taken whether the "personal author" was in fact an editor or compiler. The results were as follows: Out of 743 cards recorded, 616 were for personal author entry (38 of these were editors or compilers), 91 were corporate authors, and 36 works were catalogued under title. When the percentages were calculated, it was found that the union catalog had 82.91% personal author, 12.24% corporate entries, and 4.85% title entries.

(c) Age of works according to date of publication. The main problem encountered here was how to handle serials. It was decided that for serials the "age" would be the beginning date of the serial. Out of the 743 cards, 27 were serials. The results divided as follows:

Published 1960 or after--142 cards (of these 3 serials)
Published 1940-1959--231 cards (12 serials)
Published up to and including 1939--368 cards (12 serials)
Date of publication missing--2 cards
Total--743 cards

When the percentages were calculated it was found that the union catalog is heavily weighted toward older works; a total of 49.66% of the catalog represents works published before 1940. In the course of the sampling it was noted--although not recorded in detail--that many of these older works were very old and possibly rare items in the JUL Divinity Library, published in the 18th and 19th centuries. A total of 31.17% of the works were published between 1940 and 1959. Works published 1960 and after totaled 19.16%. In this connection it must be noted that the outcome may have been somewhat influenced by the fact that at the time the sampling was done the union catalog contained some 5000 cards for works already withdrawn from the Nashville Public Library which had not yet had the time to

have the cards removed from the union catalog. It is probable that many of these were older works, and that this might have influenced the large number of pre-1940 works. Fisk University has now also drawn attention to the fact that they have nearly 5000 cards to pull for withdrawals made from that library, but since the practice has been that each library should send a staff member to pull out the cards from the union catalog, and Fisk Library has not had any staff member to spare for this purpose, the withdrawal cards have been accumulating. Another factor influencing the results of this part of the random sample is that when the sample was conducted there was a backlog of filing of new additions to the union catalog amounting to perhaps 45,000 cards, due to the shortage of staff at the JUL Central Division which has up to now serviced the union catalog. It is logical to assume that many of these recently contributed cards are for recent works, published after 1960. How much these two facts would influence the results of this part of the sample it is impossible to estimate; indeed, they may cancel each other out.

(d) Distribution per subject area according to the Dewey Decimal Classification. The Dewey Decimal Classification was chosen as the basis for this aspect of the sampling because the majority of the libraries belonging to the union catalog either use it or have been using it until recently. The cards in the union catalog include the call number given the work at the library holding it. While many of these are no longer correct, due to reclassification, they do furnish some kind of an idea of the subject of the work in question. The problem encountered was with cards submitted by libraries using the LC classification (sometimes with local ammendments), other systems, or old cards using simplified classification for works of fiction, etc. These problems were solved as follows: if the card to be recorded did not have a Dewey call number and represented a multiple copy, the Dewey call number of one of the other copies was recorded; if it was a unique title the classification number was later "translated" into the Dewey system. In some cases, for recent works, the LC card would give a Dewey number at the bottom, in addition to the suggested LC number.

Due to the above difficulties, and due to the fact that classification is a somewhat subjective matter (noted by the fact that multiples in some cases were classified differently by different libraries), and due to simple classification errors or even typographical errors, the subject distribution of the union catalog must not be considered to be anything but a very rough idea of how the works recorded in it divide among subject areas. Appendix C shows the more detailed breakdown of the sample (indicating how many cards out of the total of 743 cards represented the subsections in Dewey down to the Second Summary of 100 divisions); the calculated percentages indicate the following subject distribution:

000	Generalities	5.9%
100	Philosophy and Related	4.8%
200	Religion	9.9%
300	Social Sciences	19.2%
400	Language	1.9%
500	Pure Sciences	6.2%

600	Technology (Applied sci.)	10.6%
700	The Arts	5.8%
800	Literature & Rhetoric	18.0%
900	General Geog. & History	17.7%

Thus, the "strongest" subject area of the union catalog seems to be the Social Sciences, closely followed by Literature and Rhetoric, and General Geography and History.

One further aspect which was considered for inclusion in the Random Sample was to determine the average number of characters in the record (catalog card). At the time the sample was taken, no very clear picture had been formed of the computerization procedures that might be used with the union catalog. It was, however, fairly well agreed that a union catalog which was to serve very largely students and researchers could not be a short title catalog with minimum information, such as some computerized book catalogs serving public library clienteles are. The possibility of basing the computerized catalog on Library of Congress MARC II format and tapes becoming increasingly available had been considered. Mr. Wilburn Clouse, the consultant for computerization aspects for this study, did not feel, however, that recording of the total number of characters on a catalog card--which would be a very slow procedure, and time was of the essence in this study--would be worth while, since others had already conducted similar studies, and library materials in the union catalog libraries would not be different from those already studied elsewhere.[1]

(c) Questionnaire to and Interviews with Present and Prospective Members of the Union Catalog

At the beginning of the data-gathering stage of the study a questionnaire (Appendix D) was prepared and sent to all present members of the Nashville Union Catalog and to twenty-two selected other area libraries which might become members of the union catalog if it was to be expanded (for list of questionnaire recipients, see Appendix E). Since the questions included many opinion questions and since it was deemed desirable to get a general idea of how librarians felt about certain aspects of interlibrary cooperation, it was decided to send the questionnaire to the separate parts of JUL as well, instead of merely sending one questionnaire to the director of the Joint University Libraries. This was done upon the recommendation of the Advisory Committee of which the director of JUL was a member. The Committee felt that while the JUL libraries are responsible to the one and same administrative head, in many ways they still are separate and independent libraries having their own problems and attitudes in connection with interlibrary cooperation. That this is indeed the case was amply illustrated in the diversity of the questionnaire responses and in the interviews with these librarians.

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[1]See Dolby et. al.

The prospective member libraries to which the questionnaire was sent included those libraries which had at earlier times been suggested for inclusion in the union catalog but also included a number of other libraries, many at some distance from Nashville. The intention had been to also include libraries of industrial firms but preliminary information indicated that the most likely ones to contact were having some internal difficulties, changes of personnel, etc., and hence not likely to be able to respond in a useful way to the idea of inclusion in the union catalog at the present time. It was decided that these could be contacted at a later date, if expansion did indeed become possible.

1. Rationale for the questions presented. Questions 1-4 identify the library and the person responsible for answering the questionnaire--in most cases the head librarian. Questions 5-9 furnish statistics indicating the size of the library. An attempt was made to separate these statistics into items useful for calculation of the growth of the union catalog in the event that the responding library was to be included in it. Only too late was it realized that in addition to volume count, a title count (based on the shelflist) should have been requested. This omission was remedied, in some cases, in the interviews.

Questions 10-14 are designed to determine the uniformity or differences in cataloging and classification practices among area libraries. The union catalog has up to now included the call numbers of the member libraries, but since these are no longer reliable due to reclassification, it was felt that the call numbers might be omitted entirely, especially if there would continue to be great differences between any additional libraries included in the union catalog. If, however, it turned out that a large number of libraries were using the same classification system and subject heading list, the prospects of a centralized processing center for at least some types of libraries might become desirable and realistic. Also, great uniformity in subject headings used would facilitate adding a subject approach to the union catalog.

Question 14 is aimed at determining the extent to which area libraries used standardized cataloging provided by the Library of Congress. The more such was used, the easier the union catalog could be computerized using MARC II tapes. In the interviews it was further inquired whether the "type own cards" check meant that they were typed on basis of LC copy of not.

In order to avoid preparing two sets of questionnaires, question 15 separates the present and prospective members. Questions 16-22 were directed to present members only with the view of determining how adequately they themselves felt they had supported the union catalog, as well as their attitude toward aprticipation in ti at present and if it were to be expanded and improved.

Question 23 inquires into the extent of interlibrary co-operation prevalent in the Nashville area at present.

Questions 24-35 try to get a clearer picture of the interlibrary loan procedures that area libraries are at present utilizing. Preliminary discussions with JUL librarians had indicated that libraries tend to rely upon

the Library of Congress for materials they cannot locate either through the Nashville Union Catalog or have the location already furnished by the patron. However, the amount of time involved in getting materials this way was felt to be too long. Question 36 aimed at checking how much duplication of information there would be with listing holdings both with the Library of Congress and the union catalog "at home." Where the response was positive, interview questions would further pin down what type of materials were reported, and how big a share of the library's holdings this might be.

Questions 37-39 try to determine the interest in improved interlibrary loan services in Tennessee; questions 40-42 take this a step further by looking into the need for a bibliographical center for the region as an extension of the location and switching service.

Question 43 aims at determining the particular needs (or gaps) of the library responding, which might be alleviated by inclusion of a library strong in that area.

Question 44 asks about the different types of patrons that the union catalog libraries would need to serve--this having implications on the willingness of some libraries to lend their materials.

Questions 45 and 46 attempt to determine the attitude of libraries to lending or making available their materials.

Question 47 tried to get a record of what additional unique materials might be added to the union catalog by new members.

Questions 48 and 49 look into the need for a Union List of Serials for the region.

Question 50 tried to determine the desire to locate materials other than books in the area.

Questions 51-58 are aimed at getting an idea of the feeling toward participation in an expanded union catalog, even to the extent of having to pay for such participation. Question 51 expected a confirmation of the assumption that knowledge of the availability of some materials nearby might affect purchasing practices of at least some libraries, but was perhaps not correctly phrased for that purpose. Question 52 solicits opinions on a bsic question about union catalogs: should they be selective or all-inclusive? Question 53 inquires into the desire and ability to support the union catalog-bibliographic center if established, even if it is realized that many librarians might not feel inclined or able to commit themselves at this point. Interviews helped to elucidate this point more than the questionnaire responses. While the Advisory Committee tended to feel that the expansion phase could only be realized through a grant, it was decided to find out whether at least some of the libraries could and would be willing to pay for their inclusion in the union catalog. Questions 54 and 55 have this in view.

Question 56 is included to get the librarians' opinion on one aspect of the union catalog service--its accessibility to the public.

Question 57 would furnish a general feeling about the union catalog at present, while question 58 would open up the possibility of a totally new kind of accessibility to location information through a union catalog. Question 59 is asked mainly to record the present feeling toward centralized processing centers.

2. Responses to questionnaire and interview questions. The questionnaire was returned by all present member libraries, which amounted to 13 responses since it had been sent to the various parts of the Joint University Libraries. All but five prospective member libraries returned the questionnaire by the time of the summary (allowing for several late returns beyond the deadline originally set); this yielded 17 responses. Two were returned too late to be included in the summary. However, a telephone interview with the librarian of the Tennessee State University Library contributed her general attitude to many of the questions presented. Many of the questionnaires were not fully completed; especially toward the end, many answers had been left blank. Therefore, while theoretically the responses should add up to 13 where the present members alone are concerned and 30 where all respondents are concerned, the residue represents the "no answers," which in many cases have not been separately listed in the following summary.

The statistical questions 1-9 indicated that the libraries involved ranged from the very small (5000-6000 vols.) to the very large (over 600,000 vols.) unless one counts the JUL as one library complex. Since the detailed statistics will only be significant in the event that the non-member libraries are in fact to be included in the union catalog, there is no need to analyze them here. They will be noted whenever relevant to the conclusions of this study.

(Q. 10-11) The distribution of classification systems used showed that 13 libraries use the Dewey Decimal system, 15 use the LC classification (with 2 of the former planning to change to it in the near future), and 6 libraries indicated using "another" system, either solely or for part of their collection. It must be noted that of the present members, 3 have changed to LC only quite recently and are still reclassifying.

(Q. 12-13) As far as Subject Headings were concerned, the Library of Congress Subject Headings, sometimes augmented by own additions, or used in combination with another system, are in general use. Only 2 "prospective members" use Sears. The medical libraries use National Library of Medicine subject headings.

(Q. 14) The great majority of libraries use LC cards extensively or base their cataloging on LC copy. Of the present members, 11 use LC cards; 7 typed cards, mostly based on LC copy. Only Methodist Publishing House indicated that their cataloging is original, due to delay in obtaining LC cards and availability of good catalogers. Of the prospective members, 14 use LC cards, 10 type some cards as well, 3 type all their cards, 2 use other cards (e.g., Bro-Dart). From the point of view of computerization using MARC II types, this question was of significance. During interviews the great majority of librarians indicated that from 50-80% of their cataloging was identical with LC cataloging, whether LC cards were used as such

or not. In other cases, too, LC cataloging was followed as closely as possible. However, a few libraries use cataloging practices which would cause problems for the union catalog; these will be discussed in subsection 3.

Questions 15-22 were directed to present union catalog members only. Question 16 (in combination with Question 50) revealed some ignorance on the part of members as to what they were supposed to include in their contributions to the union catalog. While in the course of doing the random sample the Principal Investigator had noted that the union catalog did contain at least some cards for newspapers on microfilm, and JUL Central Division staff indicated that they furnish the union catalog with cards for microforms cataloged by them, some of the other members evidently did not send cards for their microform items, believing they were not supposed to, since they called for inclusion of microforms in response to question 50. In other respects the members confirmed what was already known from the historical records: that Methodist Publishing House sent cards for their Methodist Collection only and that the Public Library sent cards for "adult non-fiction titles" only.

Questions 17 and 18 were to furnish information on the reliability of the present union catalog. The present members indicated that they did contribute cards on a more or less regular basis, and that they also send withdrawal notices (i.e., some indicate that they send someone from their staff to make the withdrawals, as specified by the union catalog "rules"); however, three indicated that they do not send withdrawal notices. This was brought up with them during interviews, and it was found that Methodist Publishing House makes no withdrawals from the Methodist Collection; Vanderbilt Law library had "very infrequent withdrawals"; and Fisk, being aware of the rule about sending over someone from its staff but not having had anyone to spare for some time, has been accumulating a pile of some 5000 withdrawals which will somehow have to be pulled out of the union catalog.

(Q. 19) Statistics on cards sent and withdrawn are kept by four. (Q. 20) Contributing to the union catalog is entrusted to a particular staff member in six cases.

Question 21 on the present members' attitude toward participation in the union catalog yielded the following information: 6 found it important, 3 moderately important, 1 pointless; 3 did not answer this question--two of these were subsections of other JUL units (Science and Peabody-Music) whose contributions are not handled by themselves but by JUL Central Division and Peabody, respectively; the third is Meharry which has not been an active participant for the past several years. Conversations with Meharry's librarian, however, indicate that Meharry will resume active participation as soon as its library has been brought into good order again after a long period of inadequate management by non-professional personnel.

Question 22 raised the prospect of an improved and expanded union catalog. Such improvement would influence a change in the attitude toward the union catalog of only two librarians; seven indicated that they would not change their mind as expressed in response to Question 21. Two of the JUL

special libraries are among those which feel that they are in no way helped by the union catalog; there is no other library in the State of Tennessee which could furnish them materials they lack. Hence at least one (JUL-Divinity) is looking toward combinations with other special libraries in its field elsewhere in the United States, rather than in the narrower region. This does not, however, mean that they are thinking of removing themselves from the union catalog. As part of JUL they feel they will continue to belong to it as long as JUL is bearing any financial burden connected with it. It is recognized that while they cannot profit from the union catalog, making their resources available to others through the union catalog is important.

Question 23 brings answers from present and prospective members together again. Many of the present members are involved in cooperation as the "Joint University Libraries." Other present members and most of those five prospective members that indicated having cooperative programs with other libraries have these arrangements with the JUL. However, the medical libraries which belong to the union catalog are active participants in the Regional Medical Program and Regional Medical Library Program which involve a union catalog at Emory University and preparation of a union list of pertinent serials for the Southeastern region. In addition, there are tentative plans for exchange of catalogs between VU-Med. and Meharry. The Public Library is one of four Technical Information Centers (TIC) in Tennessee. Austin Peay State University has established a fast interlibrary loan service with JUL with delivery by United Parcel Service (not on a regular basis but when need arises). The Dargan-Carver Library (Baptist Sunday School Board) maintains a Baptist Union Catalog which includes the holdings of a number of Baptist institutions in the United States.

(Q. 24) All libraries involved in the questionnaire (except one of the prospective members) indicate that they do have interlibrary loan requests. For some of the JUL libraries these are handled by the JUL Central Division which has a TWX. The present members began their search by consulting the Nashville Union Catalog, with the exception of Meharry for which the first contact was with VU-Med. Of the prospective members only three start their search with the union catalog; two of these are located in its proximity, the third one's librarian is well acquainted with it. In many cases knowledge of the union catalog was hazy. In any event, it turned out that the patrons requesting items on interlibrary loan would in most cases indicate the source as well. Questions 26 and 27 did not yield anything very definite. Statistics on consultation were not kept except by the JUL Central Division. A few only indicated success in locating items this way: 3 "often," 3 "seldom."

(Q. 28-31) Of the present members, five owned a full set of the National Union Catalog, two owned a partial set, five consulted it at another library. Only six consulted it for ILL purposes; however, ten indicate that they locate items this way. Of the prospective members, six owned the NUC, four owned a partial set, four consulted it at another library. Six consulted the NUC for ILL purposes, and five indicated that they "often" locate items this way, two "sometimes."

(Q. 32-35) Of the present members, seven contact the Library of Congress for ILL requests "sometimes," three request it by mail and four by the JUL TWX. Only four of the prospective members had contacted the Library of

Congress union catalog division for locations; three by mail and one by TWX. Almost all that had used LC locations felt that they had almost always obtained the materials from the location supplied by the Library of Congress. In three cases the location furnished had been wrong. The time spans involved ranged from five to twenty-one days to obtain a response from the Library of Congress, the average being 7-10 days; to get the materials from the location supplied would take 7-30 days, the average being 7-10 days. (Q. 37) Everyone would prefer to locate materials nearby (some, however, indicate that materials their patrons might need cannot be found locally or even in Tennessee), and a quick delivery service would be very useful (Q. 38). (Reservations to the latter are again registered by those who doubt that there would be anything to deliver to them, or that it would be needed on a regular basis.)

Questions 39-42 attempted to determine attitudes toward an expanded union catalog service. (Q. 39) Of the present member librarians, nine indicated that they felt a Nashville Area union catalog would be "very useful"; twelve of the prospective members thought so. Only two present member and four prospective member librarians thought it "not very useful." The present member librarians felt that it would not add to their chances of finding materials requested by their patrons. Among the prospective member librarians were two who are at a fair distance from Nashville, and they plus one more are in very small colleges where undergraduate students request interlibrary loans very infrequently; hence the need may not yet have arisen to locate materials quickly or in any quantity. The remaining one prospective member librarian is in a more or less self-contained special library (Upper Room).

(Q. 40) A bibliographical center for the region was found to be "very useful" by eleven present member librarians and fourteen prospective member librarians. One of the present members felt that they could handle all their bibliographical needs "at home" (State Library & Archives) and one of the JUL libraries (Divinity) did not answer this question. Of the prospective members, one (a community college outside Nashville) found the idea "not very useful" and one small religious college found it "pointless"; no motivations were furnished.

(Q. 41) All but two of the present and every one of the prospective members that answered this question thought the bibliographical center should also serve as a switching center for interlibrary loans. During interviews many of the JUL libraries, being usually on the "giving end" in interlibrary loan services, agreed that a switching center which might distribute loans more evenly would be a boon to them. Now smaller libraries in the region rely very heavily upon the JUL. If requested materials could be located also in other libraries, not too far from the requester, the burden to lend could be spread much more evenly. In fact, this aspect was the only justification for an expanded union catalog that some of these librarians could see.

(Q. 42) It was apparent that many librarians were not too familiar with bibliographical centers and what services such might render. Many did not answer this question. Among services listed were:

-identification of local or Tennessee materials
-identification of old and rare materials
-bibliographic verification for acquisitions and cataloging
-reproduction of catalog cards
-verification of entries for periodicals (i.e., a serials bibliographical center)
-MARC II tape center
-SDI (selective dissemination of information) based on machine readable data base
-reference service (information retrieval)
-obtain quicker location service from Library of Congress

As can be seen, some are essentially still location services, some are services that a centralized processing center might render, and some presume a computerized union catalog which is indexed in great depth.

Questions 43 and 44 attempted to identify the type of persons who request interlibrary loans and the type of materials requested. Question 43 actually had envisaged responses concerning subject areas of materials requested, but the responses often listed either type or subject area. The type of materials most often requested are periodical articles, theses and dissertations, and out of print books. In-house reports and translations of foreign language articles were also requested and difficult to trace. The subject areas indicated were often the same that were represented in the particular library, but the materials would be of a more advanced or technical nature than what was available. The number of subject areas indicated covered almost every imaginable one; but without any more detailed information it would not be possible to venture any statements about whether they could be satisfied better by inclusion of any particular Tennessee libraries in the union catalog. It is probable that to some extent they could, but in some instances involving requests from the biggest research institutions, they probably could not. These libraries will have to continue to go outside the state for some of their ILL requests.

(Q. 44) The answers spread very widely among all types of patrons, depending upon the primary clientele of the library in question. This could have been anticipated, and the question was put in merely to record the clientele of the particular library.

Questions 45 and 46 attempted to determine the present policies on lending and making available materials in the libraries approached by the questionnaire, as well as their attitude toward expanded borrowing privileges. (Q. 45) All libraries will allow use of their materials in the library. All but one will furnish Xerox copies of articles, against a fee (barring copyright violations). Most libraries will lend their materials to interlibrary loan through another library. As far as lending directly to "outsiders," most libraries are very cautious, granting such privileges only to alumni, selected individuals "at the discretion of the librarian," etc. The restrictions depend on the type of library in question. The Public Library will lend to anyone. As far as working toward expanded borrowing privileges (Q. 46) is concerned, only five indicated categorical opposition to lending to

"outsiders." The others were generally willing at least to consider expanding their lending privileges to "selected individuals of selected institutions" or just "selected individuals." Since the respondents were allowed to check several alternatives (probably not a wise suggestion), no illuminating tabulation was possible.

Question 47 concerning special contributions that a library might make to the union catalog yielded a positive response in most cases. Even the most general collections were deemed to contain some unique materials, often pertaining to local history. In interviews, some librarians expressed the opinion that all libraries have some unique items justifying their inclusion in the union catalog, if this was to be the basis for inclusion.

Questions 48 and 49 attempted to determine the need for a local union list of serials to add to the information offered by the national lists. The response was surprisingly strong on this point. Seven of the present and ten of the prospective members thought it a very good idea, and many emphasized in the interviews that this would indeed be a great service, perhaps even more useful than the expanded union catalog. Some felt it should be Tennessee-wide. Three present and six prospective members though it "useful but not essential," and only two (present members) felt it was not needed. (One of these--JUL Divinity--is amply served by existing indexes of religious periodicals.)

(Q. 50) Inclusion of non-book materials in the union catalog was favored by eight present and ten prospective members; four of each felt they should not be included. Suggested for inclusion were the following:

-state publications
-manuscript collections
-theses and dissertations
-records and tapes
-films and filmstrips
-slides
-videotapes
-serial holdings on microfilm
-microforms of all kinds (microfiche, etc.)
-art prints and art objects

It may be noted that a few of the present members do already contribute locations for various of the above items.

(Q. 51) The responses to this question, when re-introduced in the interviews, indicated that the librarians had not thought it through in some cases. Most admitted that while they had on the questionnaire marked that their collection development would not be affected by participation in the union catalog, it would certainly help avoid expensive duplication to be able to ascertain whether a copy of a proposed acquisition was available close-by. In a separate class were those special libraries which collect everything pertinent to their clientele; if they had a general collection as well, it might be affected. Many librarians did agree that some area specialization would be welcome and might be realized through participation in the union catalog.

Question 52 was an important one for the very basic decision about the nature of the union catalog. All of the prospective members favor all-inclusiveness. Considering that the union catalog envisaged was to be a

Nashville area union catalog, remarks added included that it should be perhaps Tennessee-wide for selected holdings and/or libraries. Also, arriving at all-inclusiveness could not be accomplished at once but should be done in steps. Among the present members, which are mostly large libraries, answers split 7 to 5 in favor of all-inclusiveness. The "no's" include the attitude that no smaller libraries in Tennessee--even less in the Nashville area--can offer anything new to them. One librarian is a strong supporter of a unique title catalog, while one feels that only special collections and rare materials should be included in the union catalog.

Questions 53 and 54 involved financial commitments and were approached very cautiously by a number of librarians who were reluctant to make any statements about whether or not their library would be able to contribute anything financially to the union catalog, whether as yearly contributions to its upkeep or to pay for including their retrospective holdings. (Q. 53) While of the present members almost half indicated unwillingness to support a location device which would only increase the interlibrary loan demands already placed upon them, most did not definitely refuse some type of contributions. The JUL libraries generally look to the JUL as a whole to pay any financial support required from this complex of libraries. Most of the prospective members left this question blank. Only three will definitely promise support, four think they probably could, one said definitely no. In the course of the interviews it became clear that this question could receive a more definite response only after a concrete proposal had been submitted so that the library could see what sum would need to be included in their budgeting.

Question 54 did not apply to the present members. Again the prospective members were hesitant to make any commitments (although it was not supposed to be binding in any case). However, seven indicated that they could pay for the inclusion of their holdings; only one said no. This question was also brought up in the interviews, when it was pointed out that an amendment to the assumed cost might change their mind. Reproduction of catalog cards from microfilm could still be done at 4¢ a card rather than 6¢. Again, most libraries indicated that they would have to have a definite cost proposal before being able to give an answer. Many felt the cost would not be beyond their possibilities.

Question 55 did not apply to the present members either. All of the prospective members felt that they could indeed begin contributing cards for their current acquisitions.

Question 56 attempted to determine the attitude toward the accessibility of the union catalog. The great majority favor it to be open to the general public; some feel that the "general" public is not likely to use it in person anyway, but that it should be available to students and faculty as it has been in past. Only four felt it should be accessible through its staff only. In the interviews the question of location of the union catalog itself was brought up as well, since the Advisory Committee felt that it should not be assumed that its only possible location would be its present one. The alternatives of the present location at JUL Central Division and the State Library and Archives were presented. The responses divided in favor of JUL by almost all librarians in close proximity of JUL, and they

supported their attitude by referring to difficulties in finding parking space downtown by the State Library and Archives and that the last mentioned location would not be open for as long hours as JUL. But almost all other librarians felt it really made no difference to them where the union catalog was located, especially to those who were far away from both locations and would most likely be in contact with it by phone or TWX. It was pointed out that it was almost as difficult to find parking space at the JUL Central Division as downtown. One librarian crystallized the matter by saying that the union catalog should be located "wherever the most efficient continuing service could be guaranteed."

Question 57 raised the possibility of doing away with the Nashville Union Catalog altogether, if no particular enthusiasm for its continuation on an improved and/or expanded basis could be found. Only one librarian thought it would be a "disaster" if the union catalog were discontinued, seventeen (of all who answered) found it regrettable, four of the prospective members felt it would not affect them at all. It is interesting to note that three of the present members also found that they would not be affected by its discontinuation--again those special libraries which have to go beyond Tennessee to find materials not in their own collections.

Question 58 brought up the possibility of a computerized union catalog which would furnish each participant (or any other library for that matter) a book catalog to use "at home"; in addition, printed copies of each library's own public catalog could be had, as well as other compilations. Six of the present and eight of the prospective members felt this would offer a special incentive to contributing to the union catalog. Many did not think so, and many did not answer this question.

The last question (Q. 59) attempted to assess the interest in a centralized processing center for the area. A slight majority was not in favor of participating in one now or in the future; yet a few registered interest in a centralized processing center for libraries of the same type as their own.

A working summary of responses prepared for the Advisory Committee appears as Appendix F.

3. Conclusions and Special Problems. On the basis of questionnaire responses and remarks as well as the interviews it could be determined--also confirmed by records on union catalog contributions--that the Nashville Union catalog does not represent the total holdings of the following member libraries: Meharry, VU-Law, and Methodist Publishing House. The two last mentioned were included after the union catalog was set up, and as far as can be ascertained, at the time of adding them their retrospective holdings were not added to the union catalog; they merely started sending cards for current acquisitions. The first-mentioned library has gone through a series of staff changes which have caused great irregularity in its contributions to the union catalog. When Meharry is again able to contribute on a regular basis, it is to be recommended that it be treated as an entirely new member, and in the process of interfiling its cards duplicate cards can be spotted and withdrawn. This procedure might have to be applied also to the other two libraries mentioned above if a complete union catalog is desired, in as much as they do not maintain accession lists.

Upon request in the fall of 1969, Tennessee State University Library and Tennessee Botanical Gardens Library began contributing cards for their current acquisitions to the union catalog. While it is definitely desirable that these two libraries be represented in the expanded union catalog, "picking-up" their retrospective holdings at a later time is going to mean a duplication of those titles for which cards have already been contributed, at least in the case of Tennessee State University's fairly large library.

Some of the present members and a few of the prospective ones contacted have definite computerization plans. The Public Library of Nashville and Davidson County is going ahead with a plan for complete computerized book catalogs. VU-Medical library is also investigating possibilities of computerizing their catalog and feel that an agreement must be arrived at with the union catalog as to what format both can use in order to interface. Both VU-Medial library and VU-Divinity library are involving themselves in national and regional plans for computerized union catalogs of holdings in their subject fields. Meharry Medical College library is also involved in the Regional Medical programs headquartered at Emory University and Birmingham, Alabama. Of the prospective members, the Dargan-Carver Library of the Baptist Sunday School Board is experimenting with short-title Data Dex computerized catalogs for some of their holdings.

The Disciples of Christ Historical Society will soon have a book catalog of its retrospective holdings. However, there will be no up-dating until 10,000 new titles have been added, which might be twenty years hence. For the past four and a half years the Disciples of Christ Historical Society has been making an additional card of their current acquisitions with a view of joining the Nashville Union Catalog. However, since they did not have the funds to include all of their retrospective holdings as well and were under the impression that this would be necessary before they could join, these cards have been kept in a separate file at the library. Since these holdings will be known through the forthcoming book catalog, it does not seem necessary to also include them in the union catalog. It is recommended that this library, if it is to become a member of the union catalog, begin contributing cards for current acquisitions starting at the point where the book catalog "ends" (when they themselves are in fact starting a new catalog). There will, however, be some problems for the union catalog with regard to some of this library's acquisitions. Cataloging is adapted to the particular needs of the Disciples of Christ, and whenever a member of the Disciples of Christ is co-author of a book, his name is given as the main author. There will thus be some search problems, unless either (1) the library agrees to catalog the union catalog card in the LC way even if this means additional work for them, or (2) "see" references are provided with cards having unorthodox entries.

(d) Microfilming and Computerizing the Union Catalog

1. Microfilming. Microfilming is pertinent to a union catalog in two respects. First, if additional libraries are to be included in it, the most efficient way today to do this is to microfilm the shelflist--or even better, the author catalog, if available--of the library in question, "bring back" the cards by Xerox Copyflo, and interfile in the union catalog. If the camera used for microfilming is portable, this could be done at the library itself without disrupting too much its daily routine. An estimate of how

much this would cost was essential in order to get an idea of whether it would be realistic to expect libraries to pay for their inclusion in the union catalog themselves, if a grant for this purpose could not be obtained. An added incentive here would be that the library could later get back the microfilm of its catalog as a safeguard for accidents to its public catalog.

Secondly, the union catalog itself could be microfilmed, both for safeguarding and to make it available to any library wishing to purchase the film for reading at its own library. This would approximate having a book catalog of the union catalog.

Since it was assumed that the Eastman Kodak comapny and the 3M company were fairly representative of the price ranges involved, these two companies were the only ones contacted in this investigation. It turned out that the camera recommended by the 3M representative was also a Kodak camera; hence only viewing equipment from 3M is considered here.

Two Kodak cameras were investigated. One was a manual feed camera, the other an automatic high speed camera. While the former is as portable as a portable typewriter, the high speed camera can be transported by station wagon. Both purchase price and rental cost were obtained. While the manual feed Recordak Portable Microfilmer RP-1 is very handy, it is so slow that when labor costs are considered it becomes much more expensive for large amounts of cards than the Automatic Reliant 600-K Microfilmer. In order to compare costs, the prospect of microfilming the total union catalog of 800,000 cards was considered. With the small camera this would take almost two months (426 1/2 hours), while with the automatic one only 45 hours. The following estimates for using the two cameras were developed, taking into account the fact that in the course of the study it had been discovered that the manual feed camera could be available free of charge entirely from two different sources--from Mr. Brooks Little of the Upper Room who has wide experience in microfilming library holdings and compiling union catalogs, having compiled the Methodist Union Catalog in 1967 (a multilith book catalog which reproduces the catalog cards); and from the Tennessee State Library and Archives.

Automatic Reliant 600 K Microfilmer

Price if purchased:		
Camera	$4,325.00	
Stacker	795.00	
Exposure control	7.00	(rental; to handle photostat cards)
Shipping cost	10.00	(approximately; from Memphis, Tenn.)
Total	$5,127.00	

Price if rented for a month:		
Camera	$ 284.00	
Stacker	63.00	
Exposure control	7.00	
Shipping cost	10.00	N (as above)
Total	$ 364.00	

Comparison of cost of filming 800,000 cards by using the above camera and the manual feed camera:

Automatic Reliant 600 K Microfilmer

$495.00 for film (8000 cards per 100 ft.; $9.90 per 200 ft.)
90.00 for labor (45 hrs. at $2.00)
364.00 for month's rental of equipment (minimum rental period)
$949.00

Manual feed camera

$495.00 for film (as above)
853.00 for labor (426 1/2 hrs. at $2.00)
0.00 for borrowed camera
$1,348.00

The above demonstrates that in any case the automatic Reliant 600 K camera, even if rented, would be cheaper in microfilming a large number of cards. In addition, if the union catalog itself is to be microfilmed to be made more accessible, it must be provided with Kodamatic Indexing which is done with ease in the process of microfilming with the automatic feed camera. This indexing will provide very quick search time on the reader equipment, and if the film is inserted into cartridges, some feel it is even easier to search than a book catalog. The above calculations assumed a reduction ratio of 24:1 which would allow filming some 8000 cards per 100 ft. film. Thus a union catalog of 800,000 cards would yield 100 cartridges. While this does not yet present a storage problem, as the union catalog expanded some libraries might find it not so convenient to have it available at their library in this form. It might be compressed by using a reduction ratio of 32:1 which would allow perhaps 10,000 cards per 100 ft. film, but this would necessitate purchase of a zoom lens for the reader equipment (price quoted $225)--a cost falling upon the library wishing to read the film.

Both the 3M company and the Kodak company have several microfilm readers on the market. Many are available in libraries already. Some take both 16mm and 35mm film and thus might combine two uses at the library. Some are reader-printers. While in our opinion the most practical for use with the union catalog would be a cartridge reader where the insertion of the cartridge and search time for the item desired is only a few seconds if Kodamatic Indexing is provided, the microfilms could be made available in roll form as well (there now also exist covers for rolls of microfilm which make them almost like cartridges and protect the film better than before). The readers and reader-printers of the two companies range in price from $1,000 to $1,895.

In this connection it might be mentioned that according to a news release dated June 8, 1969, the New Jersey State Library has made available its holdings through a Micro-Automated Catalog to nine selected area libraries. Their experience with this approach would be valuable if the union catalog is to be accessible through this medium.

No calculations were made at this time of what it would cost to include the retrospective holdings of any particular library in the union catalog.

On one hand, due to the omission in the questionnaire to ascertain the number of titles in the shelflist rather than volumes, this figure was not available (although it had been obtained for some during the interviews). However, on the basis of the above figures it would be possible to calculate the cost of microfilming, and to this could be added the cost of bringing back the cards by Xerox copyflo at an estimated 4¢ per card. It should be kept in mind that some libraries which are suspected of having high rates of duplication of titles already in the union catalog may need to provide only the microfilm which could be read on a microfilm reader/printer and prints made of only the unique items, while the duplicates could be entered on the master cards in the union catalog. (This of course assumes that duplicates will be consolidated on one card on which locations are marked.) Then, cards need only be made of the unique items.

It was not within the purpose of this study to present exact proposals to libraries about including their holdings. Since prices do change, it is therefore more to the point to leave this until such time that a decision has been made about including any particular library. In the meantime, the above figures will give enough basis to obtain some idea of the cost involved.

2. Computerization. Early in the proposal-writing stage of this research project, much interest was shown in the possibility of computerizing the Nashville Union Catalog, preferably after it had been expanded to wider coverage. Mr. Wilburn Clouse, Director of Computer Center Operations for Peabody College, had agreed to serve as a consultant. The Principal Investigator also reviewed a large amount of background readings on the subject. She met with Mr. Clouse and Mrs. Eleanor Morrissey of the JUL Technical Processes Department (who has been involved with JUL computer applications, especially a computerized Union List of Technical Serials held in JUL libraries) and discussed the possibilities involved. Mr. Clouse drew up estimates for three approaches to computerization of the union catalog, based on the assumption of a 400 character record per title.

Plan I involved developing a comprehensive book catalog that would include all of the present Nashville Union Catalog (estimated 800,000 cards; note that this did not take into account the fact of heavy duplication in the catalog, as discovered later in the course of the random sample; therefore one should consider this as a plan to computerize the union catalog when it has reached 800,000 titles). The cost analysis is as follows:

Item	Estimated Cost
1) Conversion of data into machine readable form (includes labor and equipment rental, $5.00 per hour, for a 400 character record)	$100,000
2) Punched cards (4 million cards at $1.00/1000	4,000
3) Editing and corrections	50,000
4) Programming cost (includes test time)	60,000
5) Photo composition masters (20,000 pages at $1.50 each)	30,000
6) Off-set printing (1 copy) (20,000 pages - 40 entries per page - at $ .01 per page)	200
7) Copies of Catalog - 30	6,000
TOTAL	$250,000

This plan did not make any provision for updating the book catalog. The conversion cost of $100,000 is considerably lower than what was suggested by Dolby et. al. (op. cit.) who estimated it at $ .90 per title (for records of ca.450 characters), which would amount to a total conversion cost of $720,000. The Consultant, however, felt that the cost need not be so high if the work could be done "at home." In addition, MARC II tapes would exist for at least some of the titles.

Plan II was based on using MARC II tapes for an estimated 10,000 titles of the current backlog in filing into the union catalog. The cost analysis was as follows:

Item	Estimated Cost
1) Purchase of MARC tapes (3 years at $500)	$ 1,500
2) Convert current backlog to machine readable form (estimated 10,000 titles)	2,000
3) Punched cards	500
4) Programming cost	30,000
5) Photo composition masters (250 pages at $2.00)	500
6) Off-set printing (30 copies)	100
TOTAL	$34,600

Plan III had as its objective to develop a book catalog that would meet the following conditions:

1. Microfilm current catalog
2. Begin with a backlog of 40,000 titles
3. Issue quarterly additions
4. Issue yearly combined volume, assuming a yearly increase of 50,000 titles
5. Issue entirely new catalog printing once every 5 years

The cost analysis is as follows:

A. System Development Cost (does not include management personnel)

Item	Estimated Cost
1) Convert current backlog (40,000 titles into machine readable form)	$ 7,000
2) Punched cards	300
3) Programming cost	15,000
4) Computer Processing (CPU time)	15,000
5) Microfilm current card catalog	949
29 add'l copies at $500	14,500
6) Photo composition masters (1000 pages at $2.00)	2,000
7) Off-set printing (30 copies; 100 x $ .01 x 30)	300
TOTAL	$55,049

B. Cost of New Title Additions Per Year

Item	Estimated Cost
1) Collection and conversion of data into machine readable form	$ 8,000
2) Punched cards	350
3) Computer processing cost	1,000
4) Photo composition masters (1250 pp. at $2.00)	2,500
5) Off-set printing (30 copies; 1250 pp. at $ .01)	375
TOTAL	$12,225

C. Cost of Printing Entire Catalog at 5 Year Intervals

Item	Estimated Cost
1) Computer processing cost	$ 6,000
2) Photo composition masters (6250 pp. at $2.00)	12,500
3) Off-set printing (30 copies; 6250 pp. at $ .01)	1,875
TOTAL	$20,375

Of these, A. is a one-time cost. It is obvious that Plan III is the most realistic of these plans, and the only one which would provide continuing updates of the catalog, without which computerization would hardly be worthwhile.

According to Mr. Clouse, both hardware and know-how are available locally to implement Plan III.

3. Conclusions and Recommendations

(a) Primary Questions

The basic questions concerning the future of the Nashville Union Catalog, which had to be answered by the research conducted under the present investigation, can be crystallized as follows:

A. Inclusiveness:
   1. Should the Nashville Union Catalog be continued in some form?
   2. Should it be expanded to include other libraries? If so, which ones? What are the unique strengths of area libraries?
   3. How selective or inclusive should an expanded catalog be? What would be the basis for inclusion or exclusion?

B. Format:
   1. What editing will be necessary to make the Nashville Union Catalog most useful in its present or expanded form?
   2. Should the union catalog be microfilmed and/or computerized?
      (a) How could it be microfilmed, and for how much? What else can be done with microfilms?
      (b) Is computerization feasible at any point? How? For how much?

C. Services:
   1. Should the union catalog service be expanded into a bilbiographic center for the region?
   2. What services should be available in such a center?
   3. To whom should such bibliographic services be available?
      (a) To the "general public" if funded by state and/or federal funds?
      (b) To clientele specified by the member institutions?

D. Status:
   1. Should the union catalog-bibliographic center be
      -an independent non-profit corporation?
      -part of the Joint University Libraries?
      -part of the State Library and Archives?
   2. Should it be separately funded and supported?
   3. How could it be supported?
      (a) Local library support
      (b) State/federal support
   4. Where should its location be?

(b) Answers Based on Research Findings

The above questions will now be reviewed in the light of the research findings, i.e., questionnaire responses, interviews, random sample of the union catalog, and discussions by the Advisory Committee.

A. Inclusiveness

1. SHOULD THE NASHVILLE UNION CATALOG BE CONTINUED IN SOME FORM?

The answers to the pertinent questions in the questionnaire can be tabulated as follows:

Q. 21. Attitude toward participation in the union catalog (13 present members)

	Important	Moderately Important	Pointless	No answer
Total	6	3	1	3

Q. 39. Attitude toward Nashville Area Union catalog (all 30)

	Very useful	Not very useful	Pointless	No answer
Present members	9	2	1	
Prospective members	12	4		
Total	21	6	1	2

Q. 51. Attitude toward discontinuation of Nashville Union Catalog (all 30)

	Disaster	Regrettable	No effect	No answer
Present members	1	9	3	
Prospective members		8	4	
Total	1	17	7	5

Observation: The majority is clearly in favor of retaining the union catalog.

2. SHOULD IT (THE UNION CATALOG) BE EXPANDED TO INCLUDE OTHER LIBRARIES? IF SO, WHICH ONES? WHAT ARE THE UNIQUE STRENGTHS OF AREA LIBRARIES?

3. HOW SELECTIVE OR INCLUSIVE SHOULD AN EXPANDED CATALOG BE? WHAT WOULD BE THE BASIS FOR INCLUSION OR EXCLUSION?

The above questions are so often intertwined that they should be considered together. The basic decision that has to be made is whether the union catalog should be a unique title catalog or whether it should include all or as much as possible of the holdings of all or as many libraries as possible in a given area. The supporters of a unique title catalog argue that it is too expensive to include libraries whose holdings are largely duplications of each other and the materials already listed by the union catalog. LeRoy Merritt says that a title held by ten or even five other libraries in a given region is less of a contribution to a union catalog than a title held by one or two libraries. On the other hand he states:

"A complete union catalog is the only adequate tool for a detailed study of regional library resources, the only adequate basis for a program of library specialization, and the fundamental implementation of a wide program of library cooperation."[1]

Merritt discusses ways in which a library's usefulness to a union catalog could be determined. Studies have been made on the amount of duplication in some libraries. Merritt notes that it is possible to see from a 1000-card sample the amount of duplication and base on this one's decision of the order in which to include libraries in a union catalog. Based on studies it is possible to conclude that libraries in general own titles unique to their region in direct proportion to the number of volumes they hold--i.e., their size. Hence they should be included in descending order of size, taking due note of the fact that small special libraries constitute the exceptions to this "rule." The library's usefulness to a union catalog could also be based on a study of <u>which libraries actually hold titles for which location has been requested by researchers</u>.

As far as the Nashville Union Catalog is concerned, the present members represent some of the largest libraries in the area, and hence it might be argued that addition of any but some special libraries would indeed not add anything to the usefulness of the union catalog. The questionnaire attempted to find out what other unique or rare materials might be contributed by the libraries approached. As noted before, practically all libraries were considered to have some unique materials. Some of these were indicated as follows:

American Baptist Theological Seminary
-books on or about Negro history, Bibles in foreign languages;
Upper Room
-Methodism, prayers, devotions, family worship, meditation, hymns;
Baptist Sunday School Board
-Baptist materials, Business and management, Education (ERIC), Baptist Union Catalog;
Disciples of Christ Historical Society
-literature of Disciples of Christ, Churches of Christ, Christian Church, and related groups;
Country Music Hall of Fame
-country music scores, records, history;
Tennessee State Planning Commission
-Tennessee information, Tennessee planning studies;
Austin Peay State University
-local and institutional history, microfiche cataloging (a service)
Middle Tennessee State University
-some Tennessee materials
University of Tennessee-Nashville
-future strengths: social work, nursing

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[1]Downs, p. 28.

David Lipscomb College
-Church of Christ, Restoration Movement materials
Tennessee Technological University
-small Tennessee collection, engineering
University of Tennessee Space Institute
-NASA and AGARD reports and similar (not catalogued)

On the other hand, the feeling was strong that the union catalog should not be selective but all-inclusive, indeed to the point of ultimately expanding to cover all library holdings in the State of Tennessee. All of the prospective members approached favored all-inclusiveness (Q. 52); the present members favored it 7-5, which reflects the fact that many of them have the only "unique" holdings in their subject fields in Tennessee and hence do not feel that adding other Tennessee libraries is going to contribute anything--at least not to them.

Expansion of the coverage of the union catalog as far as types of materials listed was concerned was also favored by the 8 present and 10 prospective members who supported inclusion of various non-book materials (4 of both groups did not consider it warranted). Both Merritt[1] and Brummel[2] feel that selectivity as far as library holdings reporting is concerned is more expensive and creates uncertainty. Staff time to make the choices of what to report to the union catalog and what not is more expensive than automatically sending a card for every new catalogued acquisition. Also "fiction" and "juvenalia" which are often excluded become, in time, research materials and are very hard to trace. Applying a time limit is also more expensive in the long run. While studies have shown that most requests are for recent materials, the cost of including older materials is not so high that it would justify leaving them out; indeed, it may turn out to be very costly to leave them out, since most libraries no longer maintain accession catalogs on the basis of which they could be "picked up" later, if it was so decided. Also, many librarians indicated on the questionnaire that old and rare materials are notably what the union catalog should help trace. According to the random sample, the present union catalog includes about 50% of what might be considered "older works," i.e., published before 1940; and 81% of its holdings were published before 1959. The only exclusion that Brummel considers justified, if considerations of space should demand it, would be to exclude the holdings of the library that houses the union catalog, since these could be traced through its public catalog located nearby.

The research findings would thus indicate that the Nashville Union Catalog should be expanded to include eventually the total holdings of all libraries in Tennessee. However, this would have to be accomplished in stages, as funds permit. While it might be desirable to include libraries

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[1]Downs, op. cit.

[2]Brummel, L. Union Catalogues: Their Problems and Organization. Bibliographical Handbooks 6. (Paris: UNESCO, 1956).

in order of usefulness (size, or uniqueness of holdings), and base the decision on various studies to be conducted with this in view, it may be more practical to include any library willing to "join" and able to pay for the inclusion of its holdings in the union catalog. Furthermore, it may be practical to start by including libraries in the proximity of Nashville, where other services can be coordinated, and, as experience is gained, expand geographically. This should, however, not preclude adding important libraries further away, if it is possible to do so financially. Therefore, to prescribe a set of libraries to include "now" and "later" does not seem warranted. It seems likely that those approached in the course of this study, many of which have already earlier expressed the desire to be included in the union catalog, would be the first ones to be added.

B. Format

1. WHAT EDITING WILL BE NECESSARY TO MAKE THE NASHVILLE UNION CATALOG MOST USEFUL IN ITS PRESENT OR EXPANDED FORM?

The random sample indicated 41.19% duplication in the present union catalog. If other libraries are added on the basis of the above expressed criteria (i.e., no selectivity), it is likely that duplication will continue to be high for some materials. Consolidation of entries on one master card with locations posted either on the master card itself or on a location card (the former would be preferable in order to cut down physical size, at least until there was no more space on the card for locations, no matter how compressed). A code for locations should be worked out, as well as a code explanation sheet for users and staff. The choice of type of coding and location posting should be preceded by a review of existing usage at other union catalogs in the United States, England, and perhaps elsewhere. Elimination of the call number would provide more space on the edge of the card. In the course of the study it was determined that the call numbers in the present catalog are to a large extent inaccurate. The questionnaire and interview responses indicated that a lot of reclassifying is being done these days. If all changes of call numbers would be reported to the union catalog, it would increase tremendously the work of both the libraries themselves and the union catalog staff. In most cases the call number is rechecked at the library in question. The need for the call number on the union catalog card is thus not urgent. The omission of the call number on the card sent to the union catalog by a library might necessitate using an overlay in the reproduction of that particular card; on the other hand, in the case of duplicates it would of course be eliminated along with the card after posting the location on the master card.

Whether or not locations were consolidated on master cards, the present union catalog is in need of extensive editing, review of filing, and addition of "see" reference cards and some additional guide cards. This work is so extensive and time-consuming that one staff member, who is also in charge of current filing and telephone service, will not be able to cope with it. Ideally, the union catalog should be provided with a permanent editing staff which will do continual editing to maintain a perfect catalog. However, there is urgent need of an editing operation prior to any new additions of libraries to the union catalog, or prior to microfilming the catalog for

distribution if this is decided upon. The consolidation of duplicates operation can be done by a competent professional librarian doing the editing of the union catalog.

The question of furnishing additional approaches to the union catalog, which at present is an author catalog only, was considered in the study. Especially the problems connected with providing a subject approach were studied. Opinions divide as to whether a subject approach based on an existing list of subject headings is going to add essentially to the value of the union catalog, considering that it is backed up by a good collection of bibliographical tools and should continue to be so. Also, studies have indicated that while undergraduate students are most inclined to use a subject approach, more serious researchers already know the particular work they are looking for. Questionnaire responses (Q. 12) showed that the overwhelming majority of the libraries approached use LC subject headings, either solely or in combination with others. If a subject approach based on Library of Congress subject headings were deemed to add considerably to the service aspects of the union catalog, it might be required that on the card furnished for the union catalog at least, the subject classification should be based on the LC subject headings list. However, in the case of special libraries which need additional, more precise subject headings for many or most of their holdings, a list of additional subject headings approved by the union catalog could be established--a "thesaurus" worked out in conjunction with the member libraries. The maintenance of such a subject authority file at the union catalog is naturally of utmost importance in order to facilitate search and control the number of subject headings. The ultimate goal for a computerized union catalog would be a thesaurus of index terms at much greater depth, permitting more sophisticated information retrieval.

It is recognized that providing any kind of subject approach to the union catalog at present will require a considerable amount of additional funds than the mere editing and consolidation of entries discussed above. A lot of staff time will be taken up in determining the right LC subject headings (or other approved headings) for the present union catalog entries not catalogued with such headings. This, then, might be a plan for the future, if a demand for this type of approach is demonstrated. On the other hand, adding a title approach whould be relatively easy--a mechanical task of duplicating each card, adding the title entry, and filing it under title.[1] This would of course double the size of the catalog physically again after the consolidation of entries. In certain fields titles are fairly descriptive of the subject approach for some areas through addition of title entries. Again, some guidance for the usefulness of adding a title approach could be gained from pertinent statistics accumulated over a period of time. On the other hand, an in-depth user study conducted over a specified short period of time might furnish guidance for the determination of any real need for either title or subject approach or both.

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[1]Locations could be omitted on title cards; for locations one would need to check the card filed under author, as indicated on the title card.

2. SHOULD THE UNION CATALOG BE MICROFILMED AND/OR COMPUTERIZED?

The idea of microfilming the union catalog and making it available in this form to any library wishing to have it "at home" developed in the course of this investigation, largely after seeing the speedy retrieval of items from a cartridge inserted microfilm with Kodamatic Indexing at the Redstone Scientific Information Center. The idea was discussed with a number of librarians as well as the Advisory Committee. The cost estimates obtained indicated that cost was not so high as to preclude the idea of providing the union catalog in this way, as a kind of substitute for a book catalog. The problem of updating the catalog remained, however. Circulation of lists of new additions and withdrawals to those libraries holding the original microfilm would be a possibility but would place an additional demand upon the union catalog staff. This might be solved by requiring purchase of this service. At intervals, the union catalog could be re-microfilmed to obtain an updated version.

While the estimates were based on a union catalog of 800,000 cards, which is the approximate size of the present catalog prior to consolidation of duplicates, it is felt that before microfilming the union catalog, two operations should be accomplished: (1) The union catalog should be edited and the duplicates consolidated. On one hand, this will reduce the cost of the microfilming (but not so much that it would be important). On the other hand, editing the catalog will improve it as a tool. (2) A better idea than microfilming the present catalog would be to first include a number of additional libraries and then microfilm it. Any re-microfilming would be done not only after there had been a lot of change due to additions and withdrawals but after adding another set of libraries.

As far as the card catalog itself is concerned, it would be continued to be maintained at union catalog headquarters as the most up-to-date version upon which all telephone, TWX, and mail service would be based. Whether personal search of the card catalog would continue to be allowed is a decision which would have to be made based on the location of the catalog--whether it would continue to be open to the public, and whether public use would be so heavy that it would be detrimental to the catalog itself. It might be more convenient to provide a microfilm and a cartridge type reader or reader/printer for public use, with staff aid for further checking if necessary. On the whole, public use of the card catalog should perhaps be discouraged if it is to be preserved in good condition for re-microfilming, and if its destruction by willful acts is a possibility. Only after complete computerization of the union catalog should the cards be entirely disposed of.

Other uses of microfilms. Microfilming would be the most practical way of adding other libraries to the union catalog. The shelflist--or, if available, the author catalog--of a library would be microfilmed, and the cards reproduced by Xerox copyflo. While most libraries approached by the questionnaire were very cautious in expressing ability to pay for their inclusion in the union catalog, if a grant for this purpose could not be obtained, the cost seems to be so low that it is more than likely that almost any library could afford it, especially as they would get back the microfilm as a safeguard for their own catalog. (Libraries are increasingly resorting to this

type of safety measure.) The cost estimates were mainly drawn up with a view of microfilming the union catalog itself, i.e., a large amount of cards, for which the automatic feed camera was found to be the more practical even if the manual feed camera could be obtained rent-free. However, where microfilming the holdings of one library, especially a small one, is concerned, use of the manual feed camera, free of charge, possibly by a person whose salary was also paid by the union catalog budget (or a grant), would reduce the cost to a library of adding its holdings to the union catalog to the cost of film plus the reproduction of the cards by Xerox copyflo. If one estimates that about 8000 titles can be filmed on a 100-foot film which costs about $5.00 and the reproduction of the cards at 4¢ a card would be $320.00 for the 8000 cards, the cost to a small library approaches the bounds of possibility rapidly.

According to questionnaire responses (Q. 58), 6 present and 8 prospective members expressed enthusiasm for computerization of the union catalog. However, many felt that their support for the union catalog was not dependent on whether it is in computer form or not, i.e., whether they will have book catalogs of it or rely on telephone service. On the other hand, many knwledgeable persons encouraged such plans, and the hardware and know-how would be available locally if the funds can be found. The fact of the increasing availability of MARC II tapes from the Library of Congress and the progress of its RECON project will in time reduce much the cost of computerization. The fact that the present catalog is "top-heavy" for older works makes it an expensive consideration at present. Other union catalogs in the United States have considered computerization, and many feel that it is feasible only for new acquisitions. This is what Plans II and III as drawn up by the Computer Consultant for this investigation envisaged. The MARC II tapes obtained by the union catalog could also be made available to other libraries in the state for their use and experimentation, as is done at present in Oklahoma,[1] and could serve as basis for centralized processing centers.

Pertinent questions requiring decision will be:

(a) From what date should computerization start?
(b) Will all new acquisitions from that date on be computerized by converting those for which there is no MARC II copy into MARC II format "at home"?
(c) What means of input should be used?
(d) How much editing is feasible?

It is to be recommended that when computerization is decided upon, titles not covered by the Library of Congress MARC II tapes should also be included in the computerized part of the union catalog by converting them "at home" into a format which corresponds to the MARC II format as closely as possible. If later the Library of Congress provides MARC II copy for them, it can be substituted. But omitting all titles for which there is no MARC II copy would necessitate continuance of filing into the retrospective catalog, which will have to be maintained on a much more "active" basis than if only withdrawals

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[1] See: Bierman, K. J. and Blue, B. J., "Processing of MARC Tapes for Cooperative Use," Journal of Library Automation, III (March 1970), 36-64.

were to be made from it (eventually it might be "frozen" when withdrawals have dwindled to a minimum).

As far as means of input is concerned, while keypunching was considered in our estimates for this study, OCR (optical character reading) or some other developing input method may be the better one at the time that computerization becomes a reality. Use of paper tape is strongly discouraged by experiences at Redstone Scientific Information Center and elsewhere where it has been used, due to the difficulty of correcting errors.

As far as editing is concerned, both editing time and correction of errors was considered not feasible for insignificant errors which are obvious to the reader, like simple typographical errors in contexts other than proper names and numbers, or where confusion might arise. Hence, while proofreading is still a necessity, judgment has to be exercised as to the real need for correction of computer input copy.

C. Services

1. SHOULD THE UNION CATALOG SERVICE BE EXPANDED INTO A BIBLIOGRAPHIC CENTER FOR THE REGION?

Questionnaire responses indicated (Q. 40) that 11 present and 15 prospective members (26 out of 30) find the idea very good, one of each thought it not very useful, while one prospective member thought it pointless (one "no answer"). During personal interviews librarians did not feel strongly about this, mainly due to unfamiliarity with such centers.

2. WHAT SERVICES SHOULD BE AVAILABLE IN SUCH A CENTER?

Responses to questions 41 and 42 indicated that the majority of the present members and all prospective members felt that the bibliographic center should also be a switching center for inter-library loans. While location service would remain the main task for the bibliographic center (or union catalog headquarters), many other services were suggested. Of these some are unrealistic for a beginning bibliographical center at least. A revised list of proposed services follows:

1. Location (identification) of any library holdings in the union catalog member libraries--through the union catalog.
2. Location of special holdings in other Tennessee libraries--based on information about such holdings collected and maintained at the Bibliographic Center.
3. Location of any library materials anywhere in the world--through contacts with other union catalogs, bibliographic centers, the Library of Congress, and through all existing location tools held at the Bibliographic center or accessible to it through above contacts.
4. Switching center for interlibrary loans.
5. Preparation of guides to and lists of library materials in the region.

6. Initiation of information sessions and courses for area librarians.
7. Coordination of library cooperation in the region--unless this is entrusted to another organ.
8. Reference service based on the union catalog and available reference tools--extent depending on the amount of staff time and sophistication of indexing of the union catalog, beginning perhaps with preparation of bibliographies and ending with information retrieval and SDI services.

The possibility of rendering the above services will depend on the availability of funds and the quality of the supporting bibliographical tools.

3. TO WHOM SHOULD SUCH BIBLIOGRAPHIC SERVICES BE AVAILABLE?

(a) To the general public, if funded by state and/or federal funds?
(b) To clientele specified by the member institutions?

The communication media in connection with the union catalog-bibliographic center could be all or some of the following:

-personal access
-telephone
-telex (TWX)
-mail

At present, access is theoretically through all these means, although telephone and personal inquiry predominate. Telephone service will undoubtedly become the most important of these for the immediate Nashville area at least, as the union catalog becomes more widely known. Whether it should be linked to points farther away by WATS lines would depend on the availability of such in the future. Sufficient staff to render efficient telephone service is an obvious necessity for the union catalog-bibliographic center. At present, requests are recorded when received, and the patron is called back after the catalog has been checked. Statistical records are maintained of these calls, and as they accumulate they will furnish valuable guidance about the need for staff to render efficient service of this kind as the demands increase (as is anticipated), as well as about the adequacy of library resources available through the union catalog to the researchers requesting locations. If other services beyond mere location are to be provided, their nature and the frequency of need for them will determine the future additional staff needs of the center.

Most questionnaire respondents (18) felt that the union catalog should be (Q. 56) "open to the general public"; 6 felt it should be open to authorized persons only, and 4 felt it should be accessible only through its staff. It is obvious that a union catalog-bibliographic center for Tennessee should ultimately be open to every citizen of Tennessee free of charge, and that it should be financed by state and/or federal funds. Whether the clientele should be restricted in any way as long as the center were funded by member institutions must be decided by these in a joint meeting. Whether the clients should be private persons as well as other libraries is another matter needing decision. In general, it would seem that the clientele would at least in the beginning consist mainly of those librarians handling interlibrary loans at various institutions. However, if the union catalog is publicized widely and becomes well known to individuals, these will no doubt call upon it either in

person (as now) or by telephone. It would not seem very efficient to ask them to resubmit their inquiries through some library. In many cases the materials they are interested in may not be available on interlibrary loan but would be available for use in the library that owns them. The union catalog should have sufficient staff to render service to individual researchers immediately so that their research can be expedited. It is unlikely that many "unnecessary" requests will bog down the work of the union catalog staff. If, however, services requested go beyond mere location information, a fee-for-service structure should be set up, if the center's budget continues to be based on contributions from individual libraries.

D. Status

1. SHOULD THE UNION CATALOG-BIBLIOGRAPHIC CENTER BE

   -an independent non-profit corporation?
   -part of the JUL?
   -part of the State Library and Archives?

2. SHOULD IT BE SEPARATELY FUNDED AND SUPPORTED?

3. HOW COULD IT BE SUPPORTED?

   -by local libraries
   -State/Federal support

Some of the large union catalogs and bibliographic centers in the United States are independent organizations having their own by-laws. Some are supported by contributions from member or user institutions, based on a certain percentage of their library budgets. At present, the Nashville Union Catalog is supported financially by the Joint University Libraries, except that the State Library and Archives is paying the wages of the staff person recently appointed to serve solely at the union catalog (telephone service and catalog maintenance) at its location in the JUL Central Division lobby.

As was already pointed out, the questionnaire respondents mostly left blank the question of whether they would be willing to contribute support funds for the union catalog. However, in discussing this matter with a number of these librarians, the impression was gained that if the sum were not too large, they could work it into their budgets. However, many of the present members, being among the biggest libraries of the region or being special libraries--both with large library budgets and heavily relied upon for interlibrary loans at present--felt that it would not be fair to require them to pay a large amount in support of the union catalog operation, in addition to continuing to furnish most materials. If the support were tied to the size of the library budget, the burden would be doubled for them, while the smaller and weaker libraries which would profit most from the union catalog service would be the ones to pay least for this service. This is a very justifiable complaint and should be taken into consideration when the support structure is determined, if the center is to be funded by individual libraries. As use statistics accumulate over the years it will be

easier to determine what libraries rely most heavily upon the center for service and which furnish most of the materials, and to base the contributions on this. In the beginning, a flat fee might be required from all libraries, plus a fee for service, either based post facto on the amount of service requested or for unusually heavy demands.

The size of contributions will naturally be determined by the size of the required yearly budget. This budget might be calculated at lower and higher levels of service. The budget should be based on an estimation of the following needs:

(a) Staff--how many and at what salary levels (professional and non-professional)
(b) Equipment and supplies
(c) Rent (if required)
(d) Communications

Separate additional funds will be needed in the initial stage to set up an expanded operation, the addition of new libraries, editing the catalog (including consolidation of cards), microfilming the catalog (if deemed desirable). Both temporary extra staff and equipment and supplies will be needed for the above. However, the yearly budget ought to include funds for continual editing of the catalog, re-microfilming at intervals, and funds for special projects (surveys, directories, etc.).

While the statement is made in Downs' work on union catalogs (op. cit.) that an "independent organization is able to raise funds more easily," this is doubtful at least as long as it is relatively unknown. However, Federal grants or State Library support might be more readily forthcoming. The legal structure of the union catalog-bibliographic center could be based on contracts with libraries and/or service agreements; a fee structure for certain types of services, or for location services to libraries that do not wish to contribute annually must be worked out.

4. WHERE SHOULD THE UNION CATALOG BE LOCATED?

The JUL does not insist that the union catalog remain on its premises. Indeed, without some funds coming from somewhere, they feel they can no longer maintain it. On the other hand, the State Library and Archives has shown much recent interest in the union catalog. The question of location was brought up in interviews with questionnaire recipients and other librarians. Based upon personal interviews with 17 questionnaire recipients, the JUL location was preferred by 9, mostly because they were close to it geographically but also because it is at the center of a large conglomeration of students and researchers. Those who were indifferent as to location or would prefer the State Library are far from JUL and use the union catalog rarely. If service would be restricted to telephone even locally, location becomes less important to an increasing number of persons interviewed. There is some feeling that being housed on the premises of an established institution is advantageous (and might avoid payment of rent). In determining location, the following considerations should be kept in mind:

1. Availability of supporting bibliographic tools
2. Interested atmosphere
3. Persons familiar with the union catalog to help new staff
4. Time periods of accessibility
5. Adequate space available--also for expansion
6. Amount of rent charged--if any
7. Availability of reference personnel to assist.

As the union catalog-bibliographic center expands and becomes established in its own right, it may well have times of accessibility other than the institution it is housed with, for instance, being open over the weekend even if housed in the State Library which is closed then. Request statistics accumulated over a period of time would indicate the needs for accessibility to the catalog and what times it should have a staff person on duty at least for location requests.

(c) Summary of Recommendations

A:1. The Nashville Union Catalog should be continued for the time being in its present card form.

A:2. It should be expanded to include all types of libraries, at first in Middle Tennessee, later in all of Tennessee. The start should be made by including those libraries approached in this study which have indicated interest in participating.

A:3. The union catalog should be as inclusive as possible. It should also contain fiction and other such multi-media resources as are regularly catalogued by its member libraries.

B:1. The union catalog should be edited before anything else is done (i.e., adding libraries). Editing should consist of (a) correction of filing errors, (b) adding see references and guide cards where useful, and (c) consolidation of duplicates on one master card and posting of locations. The union catalog should in future be provided with a permanent editing staff to maintain good condition at all times.

B:2(a). Microfilming of the union catalog, after the first (and subsequent) additions of libraries should be considered for any libraries that would like to purchase a copy of the microfilm to have it available at their libraries. The cost is not too high to make this a real possibility. Also, a microfilm of the union catalog, kept in a safe place, would be an important safeguard of the catalog which in card form is very vulnerable to destruction and prohibitively expensive to replace.

B:2(b). As soon as the union catalog set-up has been established on its new basis, funding requests for computerization of at least the current acquisitions should be submitted to likely sources, both state and federal.

C:1. The union catalog operation should be expanded into a bibliographic center. Participating libraries should be limited experimentally to local libraries but could be expanded with careful planning to Tennessee-wide.

C:2. Priorities for service: (1) To "make available" the resources of the participating libraries whose holdings are listed in the union catalog; (2) To locate materials in other libraries; (3) To serve as a switching center for interlibrary loans. Other services to be added as funds permit.

C:3. Services should be available to all citizens of Tennessee, if the venture is state-funded. Otherwise it should be limited to whomever the participating libraries shall prescribe. A "switching center" operation would include only member libraries. Communication with the center should be by telephone, TWX, mail, personal visit, and possibly WATS line in the future.

D:1. The State Library should consider the project for funding under LSCA title III, after further study of the conclusions and recommendations contained in this final report. Since this is by all appearances a state-wide venture of considerable magnitude, it should be eminently appropriate for funding on a state-wide basis and should be considered only the first phase of a system that would interface with regional and national information networks.

If State funding cannot be obtained, some other representative group (e.g., Tennessee Library Association) should attempt to find a way to support the operation.

If funding through the State Library or other grants seems not to be forthcoming, local libraries should be approached with proposals for budget needs and suggested support assessments, supplemented by a fee-for-service structure, which might produce the necessary funds to support the center.

D:2. There is no consensus on where the union catalog-bibliographic center should be located. While location in a strong research institution having a good bibliographic collection to support the operation is desirable, telephone access to such a collection may suffice. Hence, it should be located where it can give the best service and also have room for future expansion. Personal access to the union catalog is relatively important but not a paramount issue for location.

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APPENDIX B

SYMBOLS OF NASHVILLE UNION CATALOG MEMBER LIBRARIES

Fisk (Fisk University)
JUL (Joint University Libraries Central Division)
JUL Rel (Vanderbilt University Divinity School)
Peabody (George Peabody College for Teachers)
Public (Public Library of Nashville and Davidson County)
VU Med (Vanderbilt University Medical School)
State (Tennessee State Library and Archives)
Scarritt (Scarritt College)
VU Law (Vanderbilt University Law School)
Meharry (Meharry Medical College)
Meth.Pub.H. (Methodist Publishing House)

APPENDIX C

NASHVILLE UNION CATALOG
Random Sample

Distribution per subject area according to Dewey Decimal Classification

Generalities	44	5.9%
000	0	
010	21	Bibl. & Catalogs
020	16	Library Science
030	4	General encyclopedic works
040		
050	0	General periodicals
060	0	General organizations
070	3	Newspapers & journalism
080	0	General collections
090	0	Manuscripts & bk rarities

Philosophy & related	35	4.8%
100	3	
110	3	Ontology & methodology
120	0	Knowledge, cause, etc.
130	10	Pseudo-& parapsychology
140	1	Specific philos. view pts.
150	5	Psychology
160	3	Logic
170	6	Ethics
180	0	Ancient, med., Orient, philos.
190	4	Modern Western philosophy

Religion	74	9.9%
200	7	
210	0	Natural religion
220	7	Bible
230	8	Chr. doctrinal theology
240	1	Chr. moral & devotional theol.
250	6	Chr. pastoral, parochial, etc.
260	23	Chr. social & eccles. theol.
270	1	Hist. & geog. of Chr. church
280	13	Chr. denominations & sects.
290	8	Other relib. & compr. relig.

The Social Sciences	142	19.2%
300	9	
310	2	Stat. method & statistics
320	20	Political science
330	41	Economics
340	10	Law
350	6	Public administration
360	7	Welfare & association
370	37	Education
380	6	Commerce
390	4	Customs & folklore

Language	14	1.9%
400	2	
410	1	Linguistics & nonverbal
420	1	English & Anglo-Saxon
430	0	Germanic languages
440	2	French, Provencal, Catalan
450	0	Italian, Romanian, etc.
460	4	Spanish & Portuguese
470	0	Italic languages
480	1	Classical & Greek
490	3	Other languages

Pure Sciences	46	2.6%
500	22	
510	7	Mathematics
520	1	Astronomy & allied sciences
530	9	Physics
540	7	Chemistry & allied sciences
550	7	Earth Sciences
560	1	Paleontology
570	4	Anthropology & biol. sciences
580	6	Botanical sciences
590	2	Zoological sciences

Technology (Applied sci.)	79	10.6%
600	0	
610	30	Medical sciences
620	17	Engineering & allied oper.
630	7	Agriculture & agric. Industr.
640	5	Domestic arts & Sciences
650	14	Business & rel. enterprises
660	3	Chemical technology, etc.
670	1	Manufactures processible
680	1	Assembled & final products
690	1	Buildings

The Arts	43	5.8%
700	5	
710	0	Civic & landscape art
720	5	Architecture
730	4	Sculpture & plastic arts
740	2	Drawing & decorative arts
750	4	Painting & paintings
760	1	Graphic arts
770	0	Photography & photographs
780	16	Music
790	6	Recreation (Recr. arts)

Literature & rhetoric	134	18%
800	12	
810	39	Amer. lit. in English
820	40	Engl. & Anglo-Saxon lit.
830	12	Germanic lang. lit.
840	14	French, Provencal, Catalan lit.
850	2	Italian, Romanian, etc. lit.
960	8	Spanish & Portuguese lit.
870	1	Italic lang. lit.
880	0	Classical & Greek lit.
890	6	Lits. of other languages

General geog. & history etc.	132	17.7%
900	1	
910	29	General geography
920	13	General biog., general, etc.
930	4	General hist. of ancient world
940	33	General hist. of modern Europe
950	5	General hist. of modern Asia
960	1	General hist. of modern Africa
970	42	General hist. of North America
980	4	General hist. of South America
990	0	Gen. hist. of rest of world

APPENDIX D

SCHOOL OF LIBRARY SCIENCE
GEORGE PEABODY COLLEGE FOR TEACHERS

Nashville Area Union Catalog Research Project

Please return the completed questionnaire by June 15, 1970 to:

Mrs. Margareta Martin, Research Associate
School of Library Science
George Peabody College for Teachers
Nashville, Tennessee 37203

If you have any questions, please call Mrs. Martin at 327-8037.

Your assistance with this questionnaire will help us determine the future of the Nashville Union Catalog. Your cooperation will be greatly appreciated.

---

1. Name of Library_____
2. Institution it serves_____
3. Name of person completing questionnaire_____
4. Position_____
5. Number of staff employed by library: Professional___Nonprofessional___
6. Size of holdings of library, as of (date)___, excluding periodicals: _____vols.
7. Number of periodicals currently received:_____
8. Volumes added, 1968-69:_____
9. Total library budget for 1969-70: $_____
10. Classification system used: Dewey_____LC_____Other_____
11. Are you planning to change to another system in the near future? Yes___No_____If YES, which?_____
12. List of Subject Headings used: Sears_____LS_____Other_____
13. Are you planning to change to another system in the near future? Yes_____No_____If YES, which?_____
14. Catalog cards obtained for current accessions: LC cards_____ Wilson cards_____Type own cards_____Other_____
15. Are you currently, or have you ever, contributed cards to the Nashville Union Catalog? Yes_____No_____Since_____During period_____

IF YOUR ANSWER WAS NO, PLEASE SKIP TO QUESTION NO/ 23.

16. Do you contribute cards for all catalogued items? Yes_____No_____
If NO, for which?_____

17. Do you contribute regularly? Yes_____No_____Monthly_____Other_____

18. Do you also send withdrawal notices? Yes_____No_____
If YES, have you kept up with this all along? Yes_____No_____

19. Do you keep statistics on how many cards you send and withdraw?
Yes_____No_____

20. Is contributing to the union catalog assigned to a particular staff member at your library?
Yes_____No_____Specify_____

21. What is the attitude of your library to participation in the Nashville Union Catalog?
Find it important___moderately important___pointless___

22. If the union catalog is expanded to include a wider range of area libraries, and at the same time provided with staff to keep it up to date and search it for patrons contacting it by telephone (or in person), do you foresee a change in your attitude as expressed above?
Yes_____No_____
Please elaborate, if you wish!

23. Does your library have any cooperative programs with other area libraries?
Yes_____No_____If YES, what kind?_____

With which libraries?_____

24. Does your library request materials on Interlibrary Loan (ILL) for its patrons? Yes_____No_____

25. If YES, does the location process begin by consulting the Nashville Union Catalog?
Yes_____No_____ If NO, PLEASE SKIP TO QUESTION NO. 28

26. If YES, is it done: By phone_____In person_____Advising patron to check it_____

27. Are statistics kept on how often it has been possible to locate items through the union catalog? Yes_____No_____; Have located: Often_____
Seldom_____Never_____

28. Does your library own a set of the National Union Catalog? Yes_____
No_____Own partial set_____

29. If YES, is it consulted for Interlibrary loan purposes? Yes___No_____

30. If not available at your library, is a set at another library consulted?
Yes_____No_____

31. If YES to either No. 29 or 30, is your library successful in locating items for ILL this way? Always___Often___Sometimes___Seldom___Never___

32. Does your library ask the Library of Congress Union Catalog Division for locations for ILL requests? Always___Sometimes___Never_____
By mail_____By phone_____By TWX_____

33. Has the location supplied ever been erroneous? Yes_____No_____

34. Is your library usually successful in obtaining the requested materials from one of the locations supplied by the Library of Congress?

Always_____Almost always_____Seldom_____Never_____

35. How long does this procedure of handling ILL usually take?
To get response from Library of Congress: ca_____days
To get materials from location supplied: ca_____days

36. Has your library ever contributed locations to the Library of Congress?
Yes_____No_____

37. Would your library prefer to locate materials in the Nashville area, or even the state of Tennessee, if they could be obtained quicker--with good delivery service perhaps in a day? Yes_____It would make no difference_____

38. Would your library be interested in a quick delivery service for this area? Yes_____No_____

39. Would you find a Nashville <u>Area</u> Union Catalog
Very useful_____Not very useful_____Pointless_____

40. Would you welcome a bibliographical center for the region, which would also house the union catalog and could be contacted by phone or TWX for location service?
It would be: Very useful_____Not very useful_____Pointless_____

41. Should it also serve as a switching center for ILL? Yes_____No_____

42. What other services should a bibliographical center provide (i.e., what needs for bibliographical services arise in your library that you wish could be satisfied more adequately)?

43. What materials are most often requested on ILL by your patrons? Please indicate areas in order of frequency:

44. Who requests ILL service at your library? Grade 1 for frequently, 2 for occasionally:
Students: Undergrad._____Graduate_____Faculty_____
Staff of your institution_____
General public: Professional person_____Workingman_____Housewife_____
Others:_____

45. What is the policy of your library on lending materials to outsiders?
Lend no materials to outsiders_____all materials to anyone_____
all materials only to _____
all, except_____to anyone_____only to_____
Will allow use in library to anyone_____only to_____
Will lend on ILL through another library only_____
Will provide Xerox copies of articles: Yes_____No_____; Free_____
Fee:_____

46. What is the attitude of your library regarding reciprocal borrowing privileges?
Favor them: (You may check more than one.)
_____with selected institutions; e.g._____
_____for selected patrons of selected institutions
_____for selected patrons of any institutions of higher learning:
faculty_____students_____
_____for selected professional and business persons
_____for the general public
_____opposed to granting borrowing privileges to any outsiders
_____willing to work towards formula for granting borrowing privileges to a narrower or wider group of outsiders in the near future

47. Does your library have any special or rare materials that would make a valuable contribution to the Nashville Area Union Catalog? Yes___No___
If YES, specify what:

48. Would a Union List of Serials for the Nashville Area be a good idea?
Very good_____Useful but not essential_____No needed_____

49. If NO, has the national Union List of Serials and New Serial Titles been found adequate at your library? Yes_____No_____

50. Would inclusion of non-book materials in the Nashville Area Union Catalog be helpful for your library? Yes_____No_____
If YES, what type of mateirals?

51. Would your library's collection development be affected by participation in the Nashville Area Union Catalog? Yes_____No_____
If YES, specify how:

52. Should the Nashville Area Union catalog ultimately include the total holdings of all libraries in the region? Yes_____No_____
If NO, please indicate your views on what it should or should not contain:

53. If state financial support for the union catalog could not be obtained on a continuing basis, would your library be interested in contributing financially to its support if, e.g., the amount of the annual support would be proportionate to your annual library budget?
Yes_____No_____

54. Do you believe that your library would be able to pay at least part of the cost of including your retrospective holdings in the union catalog?
Yes_____No_____
(A rough estimate would be ca 6¢ per title. Note that the microfilming of your holdings would also provide your library with a permanent record other than your card catalog.)

55. If NO, could you begin contributing accessions from some future date on by preparing an extra catalog card and sending it to the union catalog on a regular (frequent) basis? Yes_____No_____

56. Do you think the union catalog should be
_____open to the general public
_____open to authorized persons only (faculty, students, etc.)
_____accessible only through its staff (by phone or TWX)

57. If the Nashville Union Catalog in its present form were discontinued, how would it affect you?
Not at all_____It would be very regrettable_____It would be a disaster_____

58. If a grant could be obtained to convert the Nashville Area Union Catalog to computerized form (which would also mean that your library could have a printed copy of the union catalog, a printed copy of your own catalog, print-outs of bibliographies, etc.), would this offer a special incentive for your library to join?
Yes_____No_____

59. Would your library be interested in participating in a centralized processing center, if one could be established in this area in the near future? Yes_____No_____
In the distant future? Yes_____No_____

PLEASE USE THE REVERSE TO ELABORATE ON ANY PARTICULAR QUESTION OR TO OFFER YOUR VIEWS ON ANY POINT RAISED BY THIS QUESTIONNAIRE!

APPENDIX E

NASHVILLE UNION CATALOG PROJECT

Questionnaire sent to following libraries:

(Present members)

Joint University Libraries
- Peabody
- Peabody Music
- Scarritt
- Divinity
- Law
- Medicine
- Science

Fisk University
Meharry Medical College
State Library & Archives
Public Library
Methodist Publishing House

(Possible new additions)

(Nashville)

Univ. of Tennessee - Nashville Center
Belmont College
Tennessee A & I State Univ.
David Lipscomb College
Trevecca Nazarine College
American Baptist Theological Seminary
Disciples of Christ Historical Society
Upper Room Devotional Library & Museum
Free Will Baptist Bible College
Baptist Sunday School Board (Dargan-Carver)
Country Music Library & Media Center
Watkins Institute
Tennessee State Planning Commission
Tennessee Dept. of Public Health
U.S. Veterans Administration Hospital

(Outside Nashville)

U.S. Veterans Administration Hospital - Murfreesboro
Middle Tennessee State Univ. - Murfreesboro
Austin Peay State Univ. - Clarksville
Columbia State Community College - Columbia
Martin College - Pulaski
Univ. of Tennessee Space Institute - Tullahoma
Tennessee Technological Univ. - Cookeville

APPENDIX F

NASHVILLE UNION CATALOG PROJECT

Primary Questions

A. Inclusiveness

1. SHOULD THE NASHVILLE UNION CATALOG BE CONTINUED IN SOME FORM?

A summary of questionnaire responses indicates the following:
(Q. 21) Present members (13) were asked about their attitude to participation in the union catalog. 6 found it important, 3 moderately important, 1 pointless (3 n/a).
(Q. 39) All (29) were asked about their attitude to a Nashville Area Union Catalog. 9 of the present and 12 of the prospective members thought it very useful, 2 of the present and 4 of the prospective thought it not very useful, 1 of the present members thought it pointless (1 n/a). In a few cases notes were added or remarks made during personal interviews that it should be wider in area--ultimately Tennessee-wide.
(Q. 57) If the present union catalog were discontinued, 1 present member would find it a disaster, 9 present and 8 prospective ones would find it regrettable, 3 present and 4 prospective feel it would not affect them at all.

Observation: The majority is clearly in favor of retaining the union catalog.

2. SHOULD IT BE EXPANDED TO INCLUDE OTHER LIBRARIES? IF SO, WHICH ONES? WHAT ARE THE UNIQUE STRENGTHS OF AREA LIBRARIES?

3. HOW SELECTIVE OR INCLUSIVE SHOULD AN EXPANDED CATALOG BE? WHAT WOULD BE THE BASIS FOR INCLUSION OR EXCLUSION?

(Q. 39) As seen above, the majority favors an expanded union catalog.

(Q. 52) Librarians were asked to indicate whether they believed a Nashville Area Union Catalog ultimately should include the total holdings of all libraries in the region. The present members were 7-5 in favor of all-inclusiveness; all of the prospective members favored all-inclusiveness, some on a Tennessee-wide basis.

Note: Many of the present members have the only "unique" holdings in their subject fields in Tennessee and hence do not feel that adding other Tennessee libraries is going to help them. However, the union catalog service must be viewed from the angle of the small, poorer, and less well-equipped library.

What libraries to add? Two conflicting views:
1. More or less unique title union catalog
2. Eventually a full record of library holdings in Tennessee
Middle ground: some duplication desirable in order to distribute the inter-library loan burden more equitably.
A further consideration is the influence upon acquisitions that knowledge of abundant proximity of some title might have.

Unique strengths in area libraries
(Q. 47) On basis of questionnaire responses, the following prospective member libraries indicate holdings of rare or special materials as follows:
Amer. Baptist Theol. Sem. - books on or about Negro history, bibles in foreign languages
Upper Room - Methodism, Prayers, Devotions, Family worship, Meditation, Hymns
Baptist Sunday School Bd. - Baptist materials; Business and management, Education (ERIC); (Baptist Union Catalog)
Disc. of Christ Hist. Sty. - Disciples of Christ, Chruches of Christ, Christian Chruch, and related groups literature
Country Music Hall of Fame - Country music scores, records, history
Tenn. State Planning Commission - Tennessee information, planning studies in Tennessee
APSU - local and institutional history; (microfiche cataloging)
MTSU - some Tennessee materials
UT-N'ville - (future strengths: social work, nursing)
David Lipscomb - Church of Christ, Restoration Movement materials
Tenn. Technological Univ. - small Tennessee collection; (engineering?)
UT Space Institute - NASA and AGARD reports, and similar (not catalogued)

Note: LeRoy Merritt, in Downs' 1942 work on union catalogs, notes that it is possible to see from a 1000 card sample the amount of duplication and base on this the determination of the order in which to include libraries. (Presumably this is a random sample from one library catalog which is checked against others to see what percentage the duplication is. If this process is applied, the libraries checked should probably be similar, e.g., college libraries or special libraries in the same field.)

Merritt also notes that the evaluation of a library's usefulness to a union catalog should be based on a study of which libraries actually hold titles for which location has been requested by researchers. "Obviously a title held by 10 or even 5 other libraries in the region is far less a contribution to a union catalog than a title held by one or two libraries." According to studies conducted, Merritt also concludes that "libraries in general own titles unique to their region in direct proportion to the number of volumes they hold"--i.e., size. Hence, "libraries should be included in descending order." But exceptions are the special libraries--often small--but with very valuable contributions.

Of interest here is also the response to question on inclusion of non-book materials (Q. 50). 8 present and 10 prospective members favored their inclusion, 4 of both groups did not. Suggested for inclusion were:

-state publications
-manuscript collections
-theses and dissertations
-records and tapes
-films
-filmstrips
-slides
-videotapes
-serial holdings on microfilm (newspapers and journals)
-microforms of all kinds (microfiche, etc.)
-art prints and art objects

Selectivity is more expensive
Merritt (in Downs) feels it is cheaper to include everything because staff time to make the choices is expensive. Also, "a complete union catalog is the only adequate tool for a detailed study of regional library resources, the only adequate basis for a program of library specialization, and the fundamental implementation of a wide program of library cooperation."

Brummel, in his 1956 work on union catalogs, agrees. He adds that excluding some holdings of a library creates uncertainty. But one might exclude the holdings of the library that houses the union catalog; this of course necessitates two searches. Fiction and juvenalia often excluded, but eventually they also become "rare" and "research materials" and are very hard to trace.

Time limit.--While studies have shown that most requests are for recent materials, the cost of including older materials is not so high that it would justify leaving them out. Indeed, it may be very costly to leave them out, since most libraries no longer maintain accession catalogs which might facilitate including them at a later date, if so was decided. Also, many librarians indicated that old and rare materials were what the union catalog should help trace.

Note: According to Random Sample, the present catalog lists predominantly older works (ca 81% published before 1959; ca 50% published before 1940).

Decide: (a) Geographical limits
(b) Is unique title catalog or all-inclusive one the goal
(c) Set of libraries to add (1) now; (2) later

B. Format

1. WHAT EDITING WILL BE NECESSARY TO MAKE THE NASHVILLE UNION CATALOG MOST USEFUL IN ITS PRESENT OR EXPANDED FORM?

Estimate hours required to edit the catalog of 800,000 cards for each, and all, of following:

(a) Review of filing to correct filing errors
(b) Add guide cards where useful (some there already)
(c) Consolidate duplicates on one master card and post locations.

If (c) is done, other could be done at same time.
If libraries are added, which means interfiling their holdings (or possibly checking against their microfilm), it is certainly desirable to consolidate duplicates; the other two tasks would almost automatically follow.

Note: Desirable to omit call numbers. For new acquisitions, request that call number be omitted on union catalog card. Leave room for posting of locations.

Random Sample indicates 41.19% duplication in present catalog.

2. SHOULD THE UNION CATALOG BE MICROFILMED AND/OR COMPUTERIZED?

(a) How could it be microfilmed and for how much?
What else can be done with microfilms?

Two Kodak cameras were investigated. The manual feed camera is so slow that when labor costs are considered, it becomes more expensive for large amounts of cards, even if available free of charge from Upper Room (Mr. Brooks Little is "expert" on microfilming library catalogs). Automatic Reliant 600 K camera is high speed; can be transported in a station wagon. Must be rented or purchased from Memphis (unless one can be found in Nashville to borrow).

Price: Camera	$4,325.00		$284 per month rental for short term
Stacker	795.00		63
Exposure control	7.00	rental	7 (to handle photostate cards)
Shipping cost	10.00	ca.	10 from Memphis
Purchase price:	$5,127.00	or	$364 for month's rental of equipment

Compare total cost of filming present union catalog (without editing and consolidation of duplicates), i.e., 800,000 cards, would be:

Reliant 600 K automatic camera:

$495.00 for film (8000 cards per 100 ft; $9.90 per 200 ft.)
90.00 for labor (45 hrs at $2.00)
364.00 for month's rental of equipment
$949.00

Manual feed camera:

$495.00 for film (as above)
853.00 for labor (ca 2 months)
0.00 for borrowed camera
$1348.00

Conclusion: It is cheaper and much quicker to rent the Reliant 600 K; work could be done in less than a week.

Note: According to salesmen, with a 32:1 reduction ratio one might get up to 10,000 cards per 100 ft. film. This might necessitate purchase of zoom lens on the reader equipment--additional $225, falling upon library wishing to read film.

Most libraries already have microfilm readers, even for 16 mm film.

Prices:
-Recordak Motormatic Reader $1295.00 (takes both 16 and 35 mm film)
-Microstar Reader (Kodak) $1895.00 (cartridges; quick retrieval of indexed items)
-3M Reader Printer "400" - $1080 (16 and 35 mm)
-3M Reader Printer "400C" - $1460 (cartridges)

Search time for cartridges with Kodamatic indexing is a few seconds only. (Seen at Redstone Arsenal Scientific Information Center.)

Observations: A better idea than microfilming just the present catalog would be to first include a number of additional libraries, and after interfiling the expanded union catalog could be microfilmed and offered to any library willing to purchase the film (at cost?). One copy would be kept at the union catalog headquarters. However, the card catalog should not be done away with. From it must be pulled the withdrawals that members send in. Until computerization, the new additions would continue to be filed into the card catalog. The center would always have the most up-to-date version. At intervals, the union catalog could be re-microfilmed for those wishing an updated version. A new set of libraries could be added prior to a microfilming.

There is the further possibility of printing a book catalog from the union catalog microfilm. Cf. Methodist Union Catalog (1967; multilith).

Other uses of microfilms
A library whose shelflist was microfilmed for inclusion in the union catalog would eventually get the microfilm record of their holdings as a safety measure against destruction of the public catalog. (UT-Knoxville and MTSU use this method regularly now.)

Cost
(Q. 54) On questionnaire, majority left unanswered the question of whether they could pay for microfilming their shelflist. 7 answered yes, 1 no. Many feel they can only reply to a definite proposal of what it will cost. Note also that estimate of card reproduction was too high; it can still be done for 4¢ a card by Xerox copyflo.
Note further that the title count (shelflist) is less than the volume count we asked for.

Calculate cost for library by 8000 titles per 100 ft. film - $5.00 film plus labor, if camera provided free (possibly labor free, too?).

(b) Is computerization feasible at any point?
How? For how much?

Based on Mr. Clouse's calculations:

Plan I - conversion of present catalog - 800,000 titles with 30 book catalogs as end product: $250,200.

Note: Conversion cost is calculated as $100,000 (400 char. rec.) Cf. Dolby et al. estimate $0.90 per title (425 char. rec.), which would raise the total to $720,000.

Plan II - conversion starting with 1968 imprints and utilizing MARC II tapes as far as available; 10,000 titles, 30 book catalogs: $34,600.

Observations: Plan I - too expensive; if additional libraries included, will be even more expensive. What are chances of so big federal grant?

Plan II - more realistic. Use of MARC II tapes will make it cheaper in the long run as more become available. As RECON project progresses (backwards), more and more of the retrospective catalog could be computerized, perhaps eventually entirely. (Good idea to retain card catalog, so the computerized items can easily be pulled.) MARC II tapes could also be used for other experimentation in Tennessee (cf. Oklahoma), and could serve as basis for centralized processing center(s).

Decide:
(a) From what date on should computerization start.
(b) Will only those items for which MARC II tapes exist be computerized at first (probably no point in book catalogs for a while).
(c) Will all new acquisitions from certain date on be computerized by converting those for which MARC tapes are not available into MARC format "at home."
(d) Should keypunching or OCR be used in input (paper tape is out; on-line unrealistic at present).
(e) Question of editing and correcting. Too much editing is more expensive than it is worth.

(Q. 58) According to questionnaire responses, computerization of the union catalog meets with favorable response on the part of 6 present and 8 prospective members, but many did not answer this question.

C. Services

1. SHOULD THE UNION CATALOG SERVICE BE EXPANDED INTO A BIBLIOGRAPHIC CENTER FOR THE REGION?

(Q. 40) Questionnaire responses indicate that 11 present and 15 prospective members find the idea very good, 1 of each think it not very useful, while one prospective member thinks it pointless. During personal interviews, librarians did not feel strongly about this mainly due to unfamiliarity with such centers.

2. WHAT SERVICES SHOULD BE AVAILABLE IN SUCH A CENTER?

(Q. 41) The majority of the present members and all prospective ones felt that the bibliographic center should also be a switching center for inter-library loans. While many felt location service was the most important, other suggested services were (Q. 42):

-identification of local or Tennessee materials
-identification of old and rare materials
-bibliographic verification for acquisitions and cataloging
-reproduction of catalog cards
-verification of entries for periodicals (serials bib. center?)
-MARC II tape center
-SDI based on machine readable data base
-reference service (information retrieval)
-arrange courses in networking and library cooperation
-obtain quicker location service from LC
-contacts with other union catalogs and LC; tie-in with Regional libraries

(See also article on Reference Networks in Texas Library J., Summer '70)

3. TO WHOM SHOULD SUCH BIBLIOGRAPHIC SERVICES BE AVAILABLE?

(a) To "general public" if funded by state and/or federal funds
(b) To clientele specified by the member institutions

Note: Telephone service for location information would in any case be provided for anyone, free. Requests from libraries could possibly be billed, if this was the policy; or their frequency might provide the basis for that library's contribution to the center's support (see D:1).

Communication media: -personal access
-telephone
-telex
-mail

(Q. 56) Questionnaire respondents feel that the union catalog should be "open to the general public" - 18; to "authorized person only" - 6; through its staff - 4.

D. Status

1. SHOULD THE UNION CATALOG - BIBLIOGRAPHIC CENTER BE
(a) an independent non-profit corporation
(b) part of JUL
(c) part of the State Library

2. SHOULD IT BE SEPARATELY FUNDED AND SUPPORTED?

3. HOW COULD IT BE SUPPORTED?
   (a) Local library support
   (b) State/Federal supported

While the statement is made in Downs' work that an "independent organization is able to raise funds more easily," this is doubtful, at least as long as it is relatively unknown. Federal grants might be easier to obtain. State Library support might be more readily available.

There is some feeling that being <u>housed</u> on premises of an established institution (as are e.g., Union Catalog of Pennsylvania and the PNBC) as advantageous (see also D:4 - location).

Alternative locations of JUL or State Library (as independent org.) should perhaps be based on whether the State Library is willing to support it at JUL location, or not.

<u>Local library support</u>
(Q. 53) Questionnaire responses indicate that JUL libraries, though largely positive about contributing to the support of the union catalog, expect the contribution to come from JUL as such rather than their separate budgets. Of the other members, Meharry and Public Library say "yes," Fisk is not definitely negative, and MPH is unable to reply without a definite proposal. Most of the prospective members leave the answer blank for this reason; 3 say yes, 4 probably, 1 no.

In order to be able to arrive at the amount of annual support needed, the following items must be decided on:

<u>Budget</u>
a. Staff - how many and at what salary levels (prof. & non-prof.)
b. Equipment and supplies
c. Rent (if required)
d. Communications

Support would depend on the <u>legal base</u>:
a. Contracts with libraries
b. Service agreements
c. LSCA Title III funds through State Library

<u>Note</u>: Separate funds needed in <u>initial stage</u> to set up center, add libraries, edit catalog, microfilming, etc. Ideally this would come from a grant. Some libraries are however willing to pay for their inclusion. Extra staff needed for filing and editing.

Yearly budget ought also to include money for re-microfilming of union catalog periodically, funds for special projects (surveys, directories, etc. - See <u>Texas Lib. J.</u> article on networks).

A fee structure for certain types of services, or for location services to libraries that do not wish to contribute annually, must be worked out.

The large libraries which are most often called upon to lend their materials should not be penalized by also being required to pay a large contribution. After few years' statistics accumulate, assessments may be easier to make. Users should pay their fair share.

At first, a flat fee might be required, plus fee for service.

Budget must be calculated at lower and higher levels of service.

4. WHERE SHOULD LOCATION BE?

Considerations:
a. Availability of supporting bibliographical tools
b. Interested atmosphere
c. Persons familiar with union catalog to help new staff
d. Time periods of accessibility
e. Where is space available--room for expansion as well
f. How much rent would be charged
g. Availability of reference personnel to assist--at first

Based upon personal interviews with 17 librarians, JUL location was preferred by 9, usually because they were close to it but also because of its being at the center of large conglomeration of students; many who are indifferent or favor the State Library as location, are far from JUL or use the union catalog rarely.

If service is to be only by phone, more become indifferent as to location.